Appendix G
Comments and Responses

Comment Topic and Number	Comment	Commenter	Response
General Adequacy # 1	DPEIS is inadequate because it fails to assess the effects of harvest on other activities affecting fishing; if harvest is reduced, there could be a more rationale allocation of the burden of recovery.	Murphy & Bucchal LLP	Consideration of how to allocate the burden of conservation between harvest and non-harvest activities is beyond the scope of the PDEIS. Further language was added in Chapter 1 and section 1.3.1 in particular to clarify the scope.
# 2	DPEIS fails to provide any consideration of alternative harvest techniques; such as an alternative eliminating the gillnet fishery.	Murphy & Bucchal LLP	This is a programmatic EIS that considers the use of selective fishing techniques as a conceptual alternative to status quo or no fishing. Elimination of a specific gear type or other specific management alternatives would best be considered in the context of a more specific future proposed action.
# 3	The exclusion of alternatives from detailed study is arbitrary.	Murphy & Bucchal LLP	The criteria used for narrowing the range of alternatives are described in Section 2.2. Section 2.3 includes further discussion regarding alternatives excluded from analysis.
# 4	Alternative 2 provides an unspecified mixed of selective alternatives which is not adequate.	Murphy & Bucchal LLP	The PEIS was not intended to consider the pros and cons of specific selective fishery methods. Which methods warrant detailed consideration will depend on the type and location of the existing fishery and can best be considered in the context of a more specific future proposed action.
# 5	The data utilized in the DPEIS is several years old and fails to include recent low prices and record fishing runs.	Murphy & Bucchal LLP	The programmatic EIS compares outcomes between alternatives, and options within alternatives, for two sets of baseline conditions. Because of the generalized nature of the alternatives the absolute magnitude of impacts is only intended to approximate plausible outcomes. More important are the relative differences and directional changes resulting from alternatives. An updating of baselines would not affect the general pattern of outcomes. More detailed analyses will be appropriate in considering specific applications of management strategies that may be proposed in the future.

Comment Topic and Number	Comment	Commenter	Response
# 6	The DPEIS lacks summary tables that integrate the information from the three regions, rendering it very difficult to understand the net effects of the various alternatives.	Murphy & Bucchal LLP	A discussion of the integration of effects across regions is included in Section 4.5 under cumulative effects. Relatively few stocks are affected in all three regions, but some are including several chinook stocks. Table 4.5-4 uses Snake River fall chinook as an example and shows the cumulative effects of harvest alternatives across the three regions.
General Adequacy # 7	Alternative 2, Option b of the DPEIS incorrectly assumes that selective fisheries would be managed to harvest the same total catch as would be available under Alternative 1, with the "savings" of listed wild fish passed through to the escapement. It is an unrealistic expectation of the "comanagers."	Confederated Tribes and Bands of the Yakama Nation	Alternative 2 for the PFMC and Columbia River jurisdictions considers two options. In Option a, conservation savings achieved by implementing selective fisheries are used to expand harvest opportunity. In Option b, conservation savings are passed on to escapement. Although commenter suggests that Option b is unlikely, NMFS believes that Option b is feasible and was therefore included in the analysis.
# 8	Harvest management does not constrain the rebuilding of upper Columbia stocks of salmon and steelhead. It is clear from the conclusions that the "No Action" alternative satisfies ESA requirements and assists in rebuilding listed stock escapements. Accordingly, there is no justification for adopting any other alternative as the Preferred Alternative for the Record of Decision on this issue.	Confederated Tribes and Bands of the Yakama Nation	Commenter argues in support of No Action alternative. As the comment is an expression of opinion by the commenter, NMFS cannot respond to the comment.
# 9	The DPEIS should consider all life cycle impacts when evaluating proposed fishing management regimes.	Confederated Tribes and Bands of the Yakama Nation and Columbia River Inter-Tribal Fish Commission	Consideration of how to allocate the burden of conservation between harvest and non-harvest activities is beyond the scope of the PDEIS. Further language was added in Chapter 1 and section 1.3.1 in particular to clarify the scope.

Comment Topic and Number	Comment	Commenter	Response
General Adequacy # 10	The DPEIS should evaluate the role of hatcheries in recovery of salmon fisheries.	Confederated Tribes and Bands of the Yakama Nation	The PEIS focuses on the use of alternative fishing strategies that could be used to meet conservation and use objectives derived from existing law. Consideration of the use of hatcheries for recovery is beyond the scope of the PEIS. The scope of the PEIS is discussed in Chapter 1. Criteria used to narrow the range of alternatives considered are discussed in Section 2.2.
# 11	The DPEIS scope of analysis should be limited to the narrow question of whether or not to issue an incidental take statement (ITS) subsequent to Section 7 consultations of ESA, or, to the review of an integrated co-management approach to restoring healthy, sustainable fisheries.	Columbia River Inter-Tribal Fish Commission	Commenter suggests different ways to characterize the scope of the PEIS. In the first case commenter suggests a much narrower scope limited to the question of whether to issue and ITS, and in the second a much broader scope related to options for achieving recovery. The scope of the PEIS and related rationale is described in detail in Chapter 1.
# 12	Only the effect of the decision to issue (or not issue) the ITS should be evaluated in the DPEIS.	Columbia River Inter-Tribal Fish Commission	This would greatly limit the scope of the PEIS to consider either a status quo or no fishing alternative. Consideration through the NEPA process of a broader range of fishing methods that might help optimize conservation and use objectives is appropriate.
# 13	Alternative 2, the mark selective fishery, is by far the best alternative, but should include information on catch-release mortality.	San Luis & Delta-Mendota Water Authority	These comments were directed primarily at the PFMC fisheries. Assumptions related to catch-release mortality are discussed in detail in Appendix E.
# 14	The DPEIS should evaluate how comprehensive (recovery) plans should be developed that consider all actions that might be taken, the costs, benefits, and feasibility of those actions, and how their effects compare with natural factors that can not be controlled.	San Luis & Delta-Mendota Water Authority	A consideration of how recovery plans should be developed is beyond the scope of the PEIS.
# 15	Commenter doubts the DPEIS' claim that there are impacts on fish from water diversion and extraction at least for the Sacramento-San Joaquin Delta.	San Luis & Delta-Mendota Water Authority	The PEIS lists water diversions/extractions as one of many of the factors for decline of salmon. The PEIS does not comment specifically about extraction from the Sacramento-San Joaquin Delta, but the generally point is well documented.

Comment Topic and Number	Comment	Commenter	Response
# 16	A report was provided entitled "Reconsideration of the Listing Status for Sacramento Winter Run Chinook Salmon" by the commenter that contained information related to winter run salmon and fishery affects.	San Luis & Delta-Mendota Water Authority	The report provided a useful and comprehensive overview that was specific to Sacramento winter run chinook. The report was referenced in Section 4.5.2.2 and added to the reference list.
# 17	The DPEIS is inadequate in the assessment of all three alternatives on the Biological Environment in Chapter 3 (Affected Environment), especially with respect to Listed and Unlisted Avian Species and Lower Trophic Level Species.	United States Department of Interior	The effects of the alternatives in each area on Listed and Unlisted Avian Species and Lower Trophic Level Species are discussed in Chapter 4.
# 18	The DPEIS should evaluate the importance of salmon carcasses as a valuable source of nutrients in estuarine, freshwater, and riparian ecosystems.	United States Department of Interior	The PEIS does discuss the role of carcasses in several sections including 4.4.1.6, 4.4.1.7, 4.4.1.8, 4.5.1.4, and 4.5.4.
# 19	The DPEIS should evaluate the increasing interest by the non-fishing public in viewing fish in their natural environment.	United States Department of Interior	As discussed in Chapter 1 all of the alternatives are presumed to be consistent with ESA requirements for survival and recovery. None of the alternatives would preclude or significantly diminish opportunity for the public to view fish in the wild.
# 20	The DPEIS should evaluate the impact that escapement of fish back to terminal areas plays in providing a range of recreational and fishing opportunities.	United States Department of Interior	Use of terminal fisheries are considered in detail particularly with respect to the Columbia River Basin. For Columbia Basin fisheries, the Options A and B under Alternative 2 contrast the effects of implementing or not terminal area fisheries.
General Adequacy # 21	While it is beyond the scope of the DPEIS, the commenter suggests NMFS reexamine the spawning escapement goals that are currently being used in ocean and terminal area management.	United States Department of Interior	Review of escapement goals or other conservation objectives is beyond the scope of the PEIS. Chapter 1 was expanded and reorganized to help clarify the scope and addresses this question in particular.
# 22	The document is does not clearly disclose critical information regarding the effects of the alternatives.	EPA	The statement is too broad for NMFS to sufficiently respond and or make corrections to the PEIS.

Comment Topic and Number	Comment	Commenter	Response
# 23	The DPEIS does not provide identifiable evidence to support its conclusions that all of the alternatives would not jeopardize ESUs.	EPA	Chapter 1 has been extensively modified. As discussed there all of the alternatives are presumed to be consistent with ESA requirements for survival and recovery. In accordance with Council on Environmental Quality (CEQ) regulations and guidance (Question 2 of FAQ), NMFS evaluated those alternatives that were feasible. Thus, alternatives that would not meet ESA requirements were not evaluated.
# 24	The DPEIS does not identify a preferred alternative.	EPA	The FPEIS has identified a preferred agency alternative. The commenter is directed to Chapter 6 of the FPEIS for further detail.
# 25	EPA recommends that the Final PEIS be written so that the decision-maker and the public can clearly understand the impacts of adopting alternatives and their ramifications including recovery of listed ESUs.	EPA	To the extent practicable, the FPEIS has been modified to make the issues evaluated in the FPEIS more understandable. The commenter is referred to Chapters 1, 2, and 4 for the revisions.
# 26	The Final PEIS should also clearly demonstrate that alternatives would comply with the Magnuson-Stevens Act and the Endangered Species Act.	EPA	Chapter 1 has been extensively modified. As discussed there all of the alternatives are presumed to be consistent with ESA requirements for survival and recovery. In accordance with Council on Environmental Quality (CEQ) regulations and guidance (Question 2 of FAQ), NMFS evaluated those alternatives that were feasible. Thus, alternatives that would not meet ESA requirements were not evaluated.
# 27	Changes to the PEIS that would help identify impacts to salmon include providing a context for the numerical data presented in the narrative.	EPA	Chapter 1 has been rewritten to provide better context for the reader.
# 28	Changes to the PEIS that would help identify impacts to salmon include providing definitions of certain terms presented in the text.	EPA	Definitions have been provided in the text of the FPEIS to address this comment.
# 29	Changes to the PEIS that would help identify impacts to salmon include providing general trends or example data (instead of figures for every scenario).	EPA	The PEIS provides discussion of trends and example data to help illustrate the generalities. For example, see sections 4.2.1.3 and 4.2.3, 4.3.1.3 and 4.3.3, and 4.4.1.3 and 4.4.3. Section 4.5 provides further examples.

Comment Topic and Number	Comment	Commenter	Response
# 30	Changes to the PEIS that would help identify impacts to salmon include providing information on how estimates of abundance, harvest, and mortality were generated.	EPA	The PEIS seeks to provide information necessary to elucidate distinctions between the alternatives without providing unnecessary detail that may detract from the main points. Sections 4.2.1, 4.3.1, and 4.4.1, and Appendix E describe key assumptions related to the identified areas of interest. NMFS has provided some additional information responsive to this comment, but generally concludes that the level of detail is consistent with the intent of the PEIS to explore differences between alternative fishing strategies.
# 31	Changes to the PEIS that would help identify impacts to salmon include providing a comprehensive discussion of how alternatives would sustain impaired stocks.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses are undertaken in the environmental review processes associated with the annual fishery management measures.
# 32	The PEIS should better describe the purpose and need of the PEIS as a programmatic document.	EPA	Chapter 1 has been rewritten to provide a more complete description of the purpose and need for this PEIS.
# 33	The Final PEIS should describe these model parameters so that the decisionmaker and the public can better understand and interpret modeled outcomes.	EPA	A more detailed description of the Pacific Salmon Treaty Chinook Technical Committee Chinook Model is provided in Appendix F to provide the reader with an example of one of the key models used in the management process.
# 34	The body of the PEIS should reference Appendix E which contains more detailed modeling information.	EPA	Appendix E is adequately referenced. The modeling approach described in Appendix E applies only to the analysis of Pacific Coast fisheries. See section 4.3.1.1 for example.
# 35	The body and Appendix E of the PEIS reference several other models and data inputs (i.e. FRAM model, Oregon Pacific Index, etc.) which should be defined so that the reader can understand how mortality and escapement were modeled.	EPA	The FRAM, OPI, and other related models are referenced only in Appendix E and are used as secondary information sources for development of the model developed for analysis of Pacific Coast fisheries in the PEIS. Given their place in the PEIS (an appendix) and the degree to which they were relied upon (for input to another model), NMFS concluded that further explanation regarding these several models was unnecessary.

Comment Topic and Number	Comment	Commenter	Response
# 36	The PEIS should describe how tribes were involved in the development of alternatives and how proposed actions would affect tribal cultural and economic resources.	EPA	Input regarding the alternatives was received from the tribes, among others, during public scooping (see Section 1.6). In 2000, NMFS circulated a preliminary draft of the PDEIS to all the regional co-managers and tribes for additional comment. Comments related to the effect of proposed actions on tribal resources are included in Sections 1.4.2, 4.3.3.2, 4.4.2.5, and 4.6.
# 37	The PEIS should describe all conflicts between hatchery supplementation and restoring natural stocks including genetic erosion of natural stocks, competition for similar resources, and reduced incentives to recover wild stocks with hatchery supplementation.	EPA	The PEIS focuses on the use of alternative fishing strategies that could be used to meet conservation and use objectives derived from existing law. Consideration of the use of hatcheries for recovery is beyond the scope of the PEIS. The scope of the PEIS is discussed in Chapter 1. Criteria used to narrow the range of alternatives considered are discussed in Section 2.2.
# 38	The PEIS should state if Alternative 2 could jeopardize the status of stocks requiring hatchery supplementation to remain viable.	EPA	As discussed in Chapter 1, all of the alternatives are presumed to be consistent with ESA requirements for survival and recovery. In accordance with Council on Environmental Quality (CEQ) regulations and guidance (Question 2 of FAQ), NMFS evaluated those alternatives that were feasible. Thus, alternatives that would not meet ESA requirements were not evaluated.
# 39	The DPEIS lacks adequate contextual pieces allowing the general public to understand the role of the DPEIS in fisheries planning, the actions proposed, and the impacts of those actions.	EPA	Chapter 1 has been rewritten to provide better context for the reader.
# 40	The DPEIS inadequately describes the need behind the DPEIS including its role in the planning process.	EPA	Chapter 1 has been rewritten to provide a more complete description of the purpose and need for this PEIS.
# 41	The DPEIS includes numerous paragraphs that contain numerical data without context which confuses rather than clarifies the general message.	EPA	Chapter 1 has been rewritten to provide better context for the reader.
# 42	The DPEIS fails to define many terms.	EPA	Definitions have been provided in the text of the FPEIS to address this comment.
# 43	The DPEIS provides no general trends or example data - instead providing all figures for every scenario.	EPA	The PEIS provides discussion of trends and example data to help illustrate the generalities. For example, see sections 4.2.1.3 and 4.2.3, 4.3.1.3 and 4.3.3, and 4.4.1.3 and 4.4.3. Section 4.5 provides further examples.

Comment Topic and Number	Comment	Commenter	Response
# 44	The DPEIS lacks information on how estimates of abundance, harvest, and mortality were generated.	EPA	The PEIS seeks to provide information necessary to elucidate distinctions between the alternatives without providing unnecessary detail that may detract from the main points. Sections 4.2.1, 4.3.1, and 4.4.1, and Appendix E describe key assumptions related to the identified areas of interest. NMFS has provided some additional information responsive to this comment, but generally concludes that the level of detail is consistent with the intent of the PEIS to explore differences between alternative fishing strategies.
# 45	The DPEIS does not provide a comprehensive discussion of how these goals will help improve the sustainability of these stocks.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses are undertaken in the environmental review processes associated with the annual fishery management measures.
# 46	Reviewers were only able to identify one cooperating agency, Alaska Department of Fish and Game, in the text and cooperating agencies were not identified on the cover sheet (required at 40 CFR 1502.11). Explain the authority and role of Cooperating agencies in implementing any resulting decision.	EPA	The role and responsibility of Alaska Department of Fish and Game in this PEIS has been added to Chapter 1.
# 47	Alternative 2 Options A and B should be divided out into two different alternatives. While they are both Mark Selective, they are different. Is the only difference season duration? Breaking them out into two alternatives would make the discussion of impacts much easier to follow.	EPA	NMFS considered presenting Alternative 2 Options A and B as separate Alternatives, but concluded that the options were variations on a consistent strategy involving the use of mark-selective fisheries and were distinct form the No Action and No Incidental Take alternatives.
<u>Modeling</u> # 1	The data utilized in the modeling for the DPEIS is based on Council figures for escapement success from 1999. The years off 2000-2002 have been extremely rich ocean years, with higher than recent returns to many Pacific Coast rivers, and should be considered in any assessment of salmon stock status.	Pacific Coast Federation of Fishermen's Association	The PEIS does not focus, in particular, on the status of the stocks. It explicitly recognizes that the status of the stocks will increase or decrease and analyzes annual management strategies that must be responsive to these changes. The PEIS does consider alternative base periods that reflect differences in ocean abundance.

Comment Topic and Number	Comment	Commenter	Response
# 2	The DPEIS should consider parent fish in the design of fishery management regimes. The assessment of fish stocks is based on the resulting escapement numbers, not the actual numbers of spawning parents.	Pacific Coast Federation of Fishermen's Association	Escapement data is routinely used in management as an indicator of abundance and trends over time. The point of the comment is unclear.
# 3	The draft PEIS does not discuss assumptions or limits underlying the models used.	EPA	The PEIS does not generally attempt to characterize the uncertainty of specific model parameter estimates used, for example, to compare one alternative under different baseline assumptions, or for comparisons between alternatives. Bounds of uncertainty for management model out puts are poorly understood. But in addition, efforts to characterize error bounds on these estimates would be inconsistent with the programmatic natural of the PEIS. Broad alternatives were compared under two sets of baseline conditions for the purpose of comparing the magnitude and direction of affects. However, key sources of uncertainty are discussed throughout the PEIS. Appendices D and E discuss uncertainties related to analytical methods for socio-economic and harvest models. Sections 4.5 and 4.6 highlight uncertainties in the broader context of cumulative effects and the economic and social implications. NMFS concludes that the level of detail provided is appropriate to the purpose of the PEIS.
Socio-Economic # 1	In Appendix D, the section on Alternative 3 assumes that there will be in increase in economic value of the resource over time as recovery occurs. While this may be true in theory, as a practical matter this can occur only if other factors leading to the decline of these species are also controlled.	Pacific Coast Federation of Fishermen's Association	NOAA Fisheries recognize that recovery of salmon and the potential increase in the fishing values associated with recovery depend on the control of many factors. NOAA Fisheries also recognize that short-term reductions in harvest associated with Alternative 3 and the associated increases in escapement are only one of many factors that could contribute to recovery. As discussed in the Cumulative Effects section (Sections 4.5.2 and 4.5.3), certain stocks are likely to benefit more from harvest reductions than other stocks.

Comment Topic and Number	Comment	Commenter	Response
# 2	Magnuson-Stevens Act conservation and socio-economic objectives require maximizing socio-economic benefits of the fisheries consistent with long-term sustainability of fishery resources.	Pacific Coast Federation of Fishermen's Association	NOAA Fisheries recognize the importance of conservation and socioeconomic objectives of the Magnuson-Stevens Act to defining the legal and policy framework for Pacific salmon fishery management. These objectives are identified in Section 1.4.1.1 of the DPEIS.
# 3	Alternative 1 would be the least damaging to the fisheries with no increased impacts to economic effects.	Pacific Coast Federation of Fishermen's Association	Comment supports alternative 1 as the Preferred alternative.
# 4	The economic impacts of Alternative 2 and 3 of the DPEIS are much higher than indicated. The commenter provided a list of nine contributing factors related to economic effects that the commenter believes were not addressed in the DPEIS.	Pacific Coast Federation of Fishermen's Association	As stated on page 8 of Chapter 1, NOAA Fisheries believe that all alternatives analyzed in the DPEIS will not jeopardize listed ESUs. The effects of the alternatives on fishery resources and the communities affected by the fisheries are discussed in Chapter 4 of the DPEIS and summarized in the Executive Summary. As summarized in Sections ES.3.2.3 and ES.3.2.4, Option A under Alternative 2 (Mark Selective Fisheries) would increase impacts on the listed Lower Columbia River and Puget Sound Chinook ESUs while reducing impacts to other ESUs and substantially increasing fishing opportunities in most areas (the exception being the California Central Coast). Compared to Alternative 1, Option B of Alternative 2 would decrease impacts to all listed ESUs but would result in a loss in personal income in most port communities.
# 5	Section ES 3.2 refers cavalierly to expected substantial human environment impacts in the overall Pacific Coast region as insignificant, based on the percentage of income in each county from salmon fishing. The actual human impacts of the complete closure of the salmon fishery (Alternative 3), or of closing the ocean fishery while increasing the inland sport fishery (Alternative 2) would be much greater than estimated, when the (other) factors are taken into account.	Pacific Coast Federation of Fishermen's Association	The DPEIS did not intend to suggest that the substantial human environment impacts identified in the Pacific Coast region would be insignificant when evaluated based on the percentage change (reduction) in personal income in each county. Rather, the DPEIS intended to indicate that, from the perspective of the regional economy, the change in personal income associated with Alternative 3 is relatively small. The Executive Summary has been rewritten to better clarify this issue.

Comment Topic and Number	Comment	Commenter	Response
# 6	The human impacts from Alternative 2, which would reallocate resources from the commercial sector to the sport fishing sector would aggravate antagonism between these economic sectors, with long term economic deficits to the commercial sector. We would like to see long term benefits from recovering the resources and eventual de-listings if possible. Also, regardless of "regional impacts" and substitutions of business, re-allocations hurt people and their economic and social impacts is substantial.	Pacific Coast Federation of Fishermen's Association	Option A of Alternative 2 was selected for evaluation to ensure that a reasonable range of harvest management alternatives were analyzed in the DPEIS. NOAA Fisheries acknowledge that this alternative would have overall beneficial effects on sport fishing opportunities and overall adverse impacts on commercial fishing opportunities, and that this outcome might contribute to antagonism between these two user groups. However, NOAA Fisheries share the objective of achieving the long-term benefits from recovery of the resource and eventual de-listing that would benefit both user groups.
# 7	The closures of salmon fisheries in the 1980s and 90s off California were devastating to the economy and social structure of isolated and heavily fishing-dependent coastal towns. In the 20 years since 1982, according to section 3.4.3.2 of the DEIS, 9,800 commercial salmon trollers have gone out of business or no longer make landings, which is 88% of the West Coast commercial salmon fleet.	Pacific Coast Federation of Fishermen's Association	NOAA Fisheries recognize the severe economic and social effects on commercial fishermen and fishing-dependent communities in California that have resulted from salmon closures in the 1980's and 1990's. As correctly stated by the PFFCA, the DPEIS indicates that the number of vessels landing salmon has declined by nearly 90% over the past 20 years. As indicated in the DPEIS, the reduction in fleet size resulted in large part from management actions based on the belief that the fleet was overcapitalized. Nevertheless, salmon closures over the past 20 years have dramatically affected the livelihoods of many commercial fishermen and changed the economic and social structure of salmon fishing-dependent coastal communities.
# 8	Socio-economics impacts to the regions should be based on the thriving fishery of 20 years ago.	Pacific Coast Federation of Fishermen's Association	The National Environmental Policy Act (NEPA) requires that the baseline for evaluating effects of the alternatives be status quo conditions or conditions associated with the No-Action Alternative. For the DPEIS, Alternative 1 (No Action) was used as the baseline for comparison, which is consistent with NEPA requirements for an EIS. The incremental effects of the Alternatives 2 and 3 on salmon fishermen is addressed in Section 4.3.2.4 (Social [Community] Effects) based on an evaluation of the degree to which salmon fishermen participate in other fisheries. As indicated on Page 4-74 of the DPEIS,

Comment Topic and Number	Comment	Commenter	Response
			closure of areas for commercial salmon trolling associated with Alternative 3 (No Incidental Take) would be expected to have a minimal financial effect on an estimated 60 percent of the salmon fishing fleet but a substantial adverse effect on the remaining 40 percent of the fleet that depend to a greater extent on revenues from salmon fishing. This impact may be lessened by opportunities to enter (or expand) into other fisheries, although it is recognized that these opportunities are limited. In response to the comment that the Alternatives 2 and 3 would "add exponentially to the losses already sustained by coastal communities by finishing off those few fishing-dependent businesses which have managed to hang on", the DPEIS does evaluate the changes in personal income to businesses that directly and indirectly rely on commercial salmon fishermen, as identified on page 4-49 of Appendix D. NOAA Fisheries recognize that additional reductions in salmon harvest would impact these businesses, thereby further contributing to a marginal business climate that has been in general decline over the past two decades in many port areas of the Pacific Region. Pages 4-71 and 4-72 of the DPEIS have been modified to acknowledge this effect.
# 9	The estimate of socio-economic impacts to the region must also include the primary, secondary, and induced effect from: closing of associated businesses, loss of infrastructure, loss of markets, changing the character and thus the attractiveness of communities, damage to small family businesses, damage to families and communities, and lost participation by fishing communities in management decisions due to poverty and dislocation, and loss of faith in management regimes. {Each factor addressed by this comment will be addressed	Pacific Coast Federation of Fishermen's Association	As described on pages D-49 and D-65 in Appendix D of the DPEIS, the analysis of economic impacts of the alternatives in the Pacific Coast region focuses on changes in total personal income at the local (county) level. Total personal income includes direct, indirect, and induced effects. The multipliers used to conduct this analysis were obtained from the Pacific Fishery Management Council. These multipliers, which are used by the Council in conducting its annual review of the ocean salmon fisheries, are derived from information developed for the Fishery Economic Assessment Model.

Comment Topic and Number	Comment	Commenter	Response
	individually below.}		Pages D-49 and D-65 have been modified to clarify that the businesses that buy and sell goods and services to salmon commercial and sport fishermen are included in the analysis.
# 9 A	Closing of Associated Businesses.	Pacific Coast Federation of Fishermen's Association	The local effects on businesses that buy and sell goods to salmon commercial fishermen and sport fishing anglers are included in the analysis of changes in local income. See changes made to pages D-49 and D-65.
# 9 B	Loss of infrastructure.	Pacific Coast Federation of Fishermen's Association	As noted in the response to comment 8 above, NOAA Fisheries recognize that the business climate for the salmon fishing industry has declined over the past 20 years in many port areas of the Pacific Coast region and has modified the DPEIS to reflect acknowledgement of this condition. The number of businesses that support the commercial salmon industry and that have closed over this time as a result of declining salmon harvest is unknown and cannot be determined as part of the evaluation for the DPEIS. Similarly, although reduced commercial salmon fishing activity may have affected funding for harbor dredging in some way, determining the extent of this effect is beyond the scope of this study.
# 9 C	Loss of Markets.	Pacific Coast Federation of Fishermen's Association	The relationship between a change in the supply of salmon and the effect on the price of salmon was evaluated by reviewing the existing literature. This was done to identify recent study results about this relationship to support statements made in the DPEIS about supply effects on consumer surplus. Results in the existing literature relevant to this issue were summarized in Section D.3.1 of Appendix D of the DPEIS. As indicated on page 7 of Appendix D of the DPEIS, the existing literature suggests that a change in the supply of salmon could affect the price (and therefore consumer surplus), but that the effect is dependent on the change in the quantity supplied. This conclusion is consistent with economic theory.

Comment Topic and Number	Comment	Commenter	Response
			NOAA Fisheries acknowledge that restrictions in the supply of ocean-caught salmon likely contributed to disruptions in the salmon market that allowed opportunities for farmed salmon operations to capture some portion of the market. In addition, increases in the supply of salmon in a particular year are likely to result in reductions in price, which can affect the ability of salmon fishermen to find markets at acceptable prices for their catch.
# 9 D	Changing the character and thus the attractiveness of communities.	Pacific Coast Federation of Fishermen's Association	NOAA Fisheries acknowledge that tourists interested in visiting port areas to experience maritime-related activity are more likely to visit port areas that appear as working fishing villages than port areas that have fallen into disrepair. Because of the programmatic nature of the DPEIS, the analysis did not evaluate the effects at individual ports and how the visual quality of those port areas could be affected by a reduction in commercial or sport fishing activity.
# 9 E	Damage to small family businesses.	Pacific Coast Federation of Fishermen's Association	NOAA Fisheries recognize that one of the effects of the decline in the commercial fishing industry in some areas of the Pacific Coast region over the past two decades has likely been to adversely affect the value of equipment and boats used for commercial salmon fishing. The impact of Alternatives 2 and 3 on this condition is difficult to assess and would require a more detailed evaluation than can be done for a programmatic-level analysis. However, pages 4-71 and 4-72 of the DPEIS have been modified to acknowledge that these alternatives may contribute to this effect in some port areas.

Comment Topic and Number	Comment	Commenter	Response
# 9 F	Damage to families and communities.	Pacific Coast Federation of Fishermen's Association	NOAA Fisheries recognize that there are social impacts associated with lost income and displacement of businesses resulting from salmon harvest reductions. Social effects associated with having to travel further to fish or to take on alternative means of employment are community-specific impacts that cannot be evaluated at the programmatic level which the DPEIS was conducted. However, social and community level impacts were addressed in Section 4.3.2.4 of the DPEIS by evaluating the extent to which salmon commercial fishermen depend on salmon for income. Page 4-74 of the DPEIS has been modified to include some of the specific social impacts identified in this comment.
#9 G	Lost participation by fishing communities in management decisions due to poverty and dislocation, and loss of faith in management regimes.	Pacific Coast Federation of Fishermen's Association	As fisheries declined people have dropped out and are less willing or able to participate in the management process. An effort was made to provide the opportunity for public comment during scoping and for the DPEIS. This EIS is programmatic and thus general in it approach. We expect that more specific management alternatives will be developed in the future that will be subject to review and comment, and that these will elicit greater interest from those that are directly affected.
# 10	The DPEIS should evaluate the economic impacts of tribal fisheries above Bonneville Dam.	Confederated Tribes and Bands of the Yakama Nation	Section 4.4.2 includes a general discussion of the effects of the alternatives on Tribal communities. The ability to conduct a more detailed economic analysis of the fishery was limited by the availability of information. As indicated in Chapter 3 some of the tribes were reluctant to provide necessary information related to their fisheries.
# 11	The DPEIS does not include an analysis of economic impacts to tribal communities from selective-retention fisheries.	Confederated Tribes and Bands of the Yakama Nation	Section 4.4.2 includes a general discussion of the effects of the alternatives on Tribal communities. The ability to conduct a more detailed economic analysis of the fishery was limited by the availability of information.

Comment Topic and Number	Comment	Commenter	Response
# 12	The DPEIS should consider and evaluate the ancillary costs of mass-marking.	Confederated Tribes and Bands of the Yakama Nation	Mass-marking is considered part of the cost of operating hatcheries. In many cases, hatcheries are operated to support fisheries. Consideration of the cost of operating hatcheries, including associated mass-marking programs, is beyond the scope of the analysis of the PEIS.
# 13	The DPEIS should point out that the economic benefits of relaxed harvest restrictions accompanying recovery can only be gained at the expense of lost revenue in those sectors that currently benefit from "relaxed harvest restrictions" on wild salmon. Although the harvest management alternatives evaluated in this DPEIS are adequate to assist in rebuilding ESA-listed populations, harvest management by itself cannot lead to the recovery of healthy and productive stocks.	Confederated Tribes and Bands of the Yakama Nation	The DPEIS discusses in the Cumulative Effects section (4.5) and elsewhere the importance to recovery of also addressing the other factors of decline and the limited ability to harvest by itself to provide changes necessary for broad scale recovery.
Endangered Species Act # 1	The EIS does not include a biological assessment or biological opinion or a summary of these documents, or provide an adequate effects analysis under NEPA describing the effects of Alternatives One and Two on listed ESUs.	EPA	Chapter 1 of the PEIS was modified to explain better how this NEPA analysis relates to ESA requirements.
# 2	The EIS does not substantiate that its proposed approaches are effective in avoiding jeopardy and allowing for recovery.	EPA	As discussed in Chapter 1 all of the alternatives are presumed to be consistent with ESA requirements for survival and recovery. In accordance with Council on Environmental Quality (CEQ) regulations and guidance (Question 2 of FAQ), NMFS evaluated those alternatives that were feasible. Thus, alternatives that would not meet ESA requirements were not evaluated.
# 3	The PEIS does not describe the ESA framework and how it is integrated with conservation and economic objectives required by the MSA.	EPA	Chapter 1 was modified to address this point.

Comment Topic and Number	Comment	Commenter	Response
Tribal Harvest and Tribal Treaty Rights # 1	None of the Alternatives meet tribal treaty standards.	Columbia River Inter-Tribal Fish Commission	It is not clear what standards are being referred to here. Clearly recovery will provide increased fishing opportunity for the tribes. In the meantime alternatives 1 and 2 provide for tribal harvest to the degree possible within the ESA related conservation limits. Alternative 1, the No Action has been implemented largely with the agreement of the tribes within the context of current conditions, although NMFS appreciates that current conditions are not considered satisfactory.
# 2	The proposed alternatives violate NMFS' trust obligations to the tribes.	Columbia River Inter-Tribal Fish Commission	As discussed in Chapter 2, Alternative 3 in particular would be inconsistent with trust obligations unless necessary for reasons of conservation. The other alternatives seek to provide for tribal harvest to the degree possible given the status of the stocks. Alternative 2 is more intrusive since it recommends, although does not presume, use of fishing methods generally not adopted by the tribes to date.
# 3	NMFS is evaluating a range of fishery management actions and practices not contemplated in developing the agreed to management plan for which the agency's action is to issue an ITS. This action ignores NMFS' active participation in the development of the management plan or annual fishery agreement for tribal and non-tribal fisheries in the Columbia River basin.	Columbia River Inter-Tribal Fish Commission	NMFS is involved with annual management planning, but as the federal action agency is also responsible for NEPA. NEPA requires consideration of a range of reasonable alternatives.
# 4	The DPEIS does not discuss how NMFS was guided by the Secretarial Order which specifies five elements the federal government must consider prior to proposing restrictions on Indian fishing. Also, the DPEIS does not disclose whether NMFS carried out the process outlined for consultation as outlined by the Order.	Columbia River Inter-Tribal Fish Commission	The revised PEIS now includes a section that explains the Secretarial Order. The five elements or conservation necessity principles apply if NMFS proposes restrictions on tribal fishing. This has not come up in recent years since mainstem fisheries have been implemented as a result of agreements between the *U.S. v Oregon* parties.

Comment Topic and Number	Comment	Commenter	Response
Tribal Harvest and Tribal Treaty Rights # 5	NMFS has exceeded the appropriate scope of review due to NMFS evaluating a range of more restrictive fishery management activities not contemplated by the tribes or other co-managers under the U.S. V. Oregon process.	Columbia River Inter-Tribal Fish Commission	NMFS has an obligation to comply with NEPA and therefore must consider a range of reasonable alternatives.
Hatchery vs. Wild Stocks # 1	The draft PEIS should describe all conflicts between hatchery supplementation and restoring natural stocks including genetic erosion of natural stocks, competition for similar resources, and reduced incentives to recover wild stocks with hatchery supplementation.	EPA	The PEIS focuses on the use of alternative fishing strategies that could be used to meet conservation and use objectives derived from existing law. Consideration of the use of hatcheries for recovery is beyond the scope of the PEIS. The scope of the PEIS is discussed in Chapter 1. Criteria used to narrow the range of alternatives considered are discussed in Section 2.2.
# 2	The EIS should identify any listed ESUs that require hatchery supplementation to keep populations from going extinct. Harvesting of these hatchery fish would appear inconsistent with the ESA.	EPA	The PEIS focuses on the use of alternative fishing strategies that could be used to meet conservation and use objectives derived from existing law. Consideration of the use of hatcheries for recovery is beyond the scope of the PEIS. The scope of the PEIS is discussed in Chapter 1. Criteria used to narrow the range of alternatives considered are discussed in Section 2.2.
Cumulative Effects # 1	Cumulative impacts of fisheries must be considered within the context of all impacts other than harvest, such as habitat loss, hatcheries, hydropower, and flow regimes, or an unfair and unrealistic burden is placed on fishermen for the success of stocks. Thus, fishermen should not be penalized for the failure of other agencies to enforce habitat rules.	Pacific Coast Federation of Fishermen's Association and San Luis & Delta-Mendota Water Authority	The Cumulative Effects section discusses the effects of hatcheries, hydropower, and other habitat related affects and their relationship to harvest to provide necessary context. Consideration of how to allocate the burden of conservation between harvest and non-harvest activities is beyond the scope of the PDEIS. Further language was added in Chapter 1 and section 1.3.1 in particular to clarify the scope.
# 2	The DPEIS provides an excellent discussion of the larger context of salmon management of which harvest management is a part. The discussion should be brought forward in the EIS into Chapter 1.	Confederated Tribes and Bands of the Yakama Nation	Chapter 1 has been modified to better clarify the purpose and need and scope of the PEIS. Chapter 1 comments on the larger context of salmon management, but the expanded discussion is properly placed in the Cumulative Effects section.

Comment Topic and Number	Comment	Commenter	Response
# 3	The DPEIS should place heavy emphasis on the cumulative effects of the current rate of degradation of freshwater and estuarine habitat in Pacific Coast watersheds, the substantial amount of negative interaction with hatchery fish which appears to be occurring, and the loss of nutrients from salmon carcasses, when considering the proposed alternatives for ocean fishery management.	United States Department of Interior	The Cumulative Effects section provides necessary discussion about hatcheries, habitat, and other factors that affect the status of salmon populations. The PEIS focuses on alternatives for managing salmon harvest recognizing that the status of the stocks will vary in response to natural variability and future human activities.
Technical Corrections and Specific Comments # 1	All references to "Yakama Indian Nation" should be changed to "Yakama Nation" in accordance with the tribe's change of name.	Confederated Tribes and Bands of the Yakama Nation	Changes were made.
#2	The document should acknowledge that selective-retention fisheries have been employed for steelhead on the Columbia River for 20 years, yet wild steelhead have not recovered and in fact all stocks are now listed under the ESA, one as "Endangered.". Having revealed that, NOAA Fisheries should be prepared to explain how selective-retention fishing can be a conservation tool in view of the evidence to the contrary.	Confederated Tribes and Bands of the Yakama Nation	We disagree that this is relevant evidence that selective fishing can't provide a conservation benefit. The fact that steelhead continued to decline despite the use of selective fishing methods over that last 20 years, suggests that other factors were also contributing to their decline, not that the strategy of releasing wild fish is inherently flawed.
#3	PES-6, Table ES-2: Under Biological Effects for Alt.2, catch numbers given for comparison with Alt.1 do not match numbers given above it for Alt.1 in the Region/Alternative column.	Confederated Tribes and Bands of the Yakama Nation	Numbers are consistent with those in Table 4.3-3. Expected catch changes between alternatives.
Technical Corrections and Specific Comments #5	P1-2, 1.2: The context for the Purpose and Need should be fleshed out considerably.	Confederated Tribes and Bands of the Yakama Nation	Chapter 1 has been modified to better clarify the purpose and need and scope of the PEIS. Chapter 1 comments on the larger context of salmon management, but the expanded discussion is properly placed in the Cumulative Effects section.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #6	P 1-5, Section 1.2.3: This wording is slightly askew and implies that NOAA Fisheries regulates tribal fisheries, even if by the least restrictive means. The tribes regulate themselves. More accurate wording would be to strike out everything after "...Columbia River basin..." and continue with "... to the extent of reviewing proposed management actions for consistency with ESA requirements, treaty fishing case law standards, and the federal trust responsibility to federally-recognized Indian tribes."	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#7	P 1-16, Second bullet should be amended to reiterate the language of the case law, which says tribes are to have the opportunity to take 50% of the harvestable number of fish.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#8	P2-4: Discussion of criteria used to narrow the range of alternatives notes that Alternative 3 may be inconsistent with treaty case law standards, and notes that treaty fisheries can be regulated for conservation only if related legal standards are met, but nowhere are the conservation standards described. The reader would benefit from a short description of conservation standards from the case law.	Confederated Tribes and Bands of the Yakama Nation	New language has been added to chapter 1 describing the conservation standards.
Technical Corrections and Specific Comments #9	P2-12, 2.2.3.1: Reword first sentence to "... in all mainstem fisheries and in Columbia River basin tributaries where direct take permits apply. Many tributaries are closed to fishing due to direct take prohibitions."	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#10	P2-13, mid page: The CRFMP expired by design on December 31, 1998.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#11	P3-19, Fig. 3.3-3: These graphs don't match with the captions and appear to be switched with Fig. 3.3-4.	Confederated Tribes and Bands of the Yakama Nation	The switch has been made.

Comment Topic and Number	Comment	Commenter	Response
#12	P3-66, The text references to these figures should emphasize that the stock composition of the runs shown in Fig. 3.5-2 has changed from primarily wild to primarily hatchery origin as habitat loss and hatchery mitigation have replaced wild stocks above Bonneville Dam.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#13	This table should present a consistent set of parameters and years, else it does more harm than good in terms of informing the reader.	Confederated Tribes and Bands of the Yakama Nation	Table provides a general picture of relative success of meeting management goals.
Technical Corrections and Specific Comments #14	P3-71, Table 3.5-3: The assessment of "Fisheries Effects" in the table doesn't match well with the text description.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
Technical Corrections and Specific Comments #15	P3-74, 3.5.3.1, second paragraph: After the first sentence, add that "The fishery at Celilo Falls, near The Dalles, Oregon, was a renowned gathering place and center of trade on the West Coast for centuries before the construction of The Dalles Dam in 1957." The same could be said for Kettle Falls above Grand Coulee Dam.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#16	P3-75, footnote 21: The footnote is incorrect. The tribes monitor and estimate the commercial sale to the public and report it together with ticketed landings during the commercial season.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#17	P3-75, harvest and effort trends: During the time period covered in this EIS, there was no commercial fishing in Zone 6 for spring chinook since 1977 or summer chinook since 1964 due to depressed stock status.	Confederated Tribes and Bands of the Yakama Nation	Language in second paragraph of that section clarifies that commercial spring and summer fisheries have been shortened or eliminated over the last two decades. The language has been modified to emphasize point.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #18	P3-83, 3.5.3.8, The third sentence would be somewhat more accurate to state, "In 1968, as a result of a Supreme Court ruling, the states were required to allow treaty fishing at usual and accustomed places in the mainstem Columbia River above Bonneville Dam." Also, what is the purpose of the first paragraph on P3-83? It has the appearance of two random thoughts having little informative value. Suggest deleting it or fleshing it out with averages for a defined time series of data.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#19	P3-83, 3.5.3.9, next-to-last paragraph: I'd suggest The Dalles Dam rather than Hood River Bridge as delimiting the majority of fishing effort.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
Technical Corrections and Specific Comments #20	P3-85, Employment, Income, and Poverty Levels: These numbers are interesting in themselves, but they would be more informative if compared with state or regional averages. The Columbia Gorge counties are routinely listed among the most depressed in Washington, so the economic impacts of various management alternatives have proportionally greater significance to communities bordering Zone 6. This could be emphasized by comparisons with statewide averages for these parameters.	Confederated Tribes and Bands of the Yakama Nation	Existing text provides comparative statistics for poverty levels in Washington and Oregon relative to Columbia River basin counties.
#21	P3-89, Fisheries: This paragraph needs some work. Second sentence, delete everything after the first clause (...ceremonial uses, ...) and insert, "and tribal management policies prioritize the restoration of natural stocks and habitats. Despite preferences for wild fish, most tribal fishers recognize that hatchery fish are more abundant in the river and in their harvests. Subsistence fishing is permitted year round in the mainstem Columbia River unless closed by tribal regulation to meet management guidelines. Primary gears are hoopnets tied to scaffolds erected	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	on the bank, hook-and-line, and gillnets permitted by the tribal government in certain circumstances. Subsistence fishing in tributaries within the ceded area (Wind River on the west to the Methow River on the north) is allowed when and where returns are strong enough to meet spawning needs and provide harvestable surplus. Dipnets and hook-and-line are the only authorized gears in tributary fisheries. Gillnets may be used in Zone 6 as authorized by the tribe to harvest prescribed numbers of fish for ceremonial and subsistence purposes. Commercial fishing is conducted primarily with gillnets, but fish caught with the subsistence gears described above may be sold during commercial seasons."		
Technical Corrections and Specific Comments #22	P3-89, Commercial Fisheries: In general, all references to Yakama Indian Nation Bureau of Indian Affairs Report 1998 should be changed to Yakama Nation 1998 and cited in the references as an annual report to the Bureau of Indian Affairs.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
Technical Corrections and Specific Comments #23	P3-89, Ceremonial and Subsistence Fisheries: Delete the second sentence; I don't know where those numbers came from, but they don't resemble anything I'm familiar with. I wouldn't attempt to put a number on this.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#24	P3-90, second paragraph, last two sentences: If it is imperative to repeatedly state that the "need to harvest" wild salmonids in these fisheries varies by tribal member, clarify the point that the willingness to release is a function of market and subsistence values. Wild steelhead are the only species I have heard of being released, and only from dipnets when there is little or no commercial interest in them. Steelhead are of lower subsistence value than Pacific salmon, and many tribal fishers would rather release	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	them than take them home. This is primarily a result of a traditional aversion to wasting resources than to any notion of selective fishing. The distinction should be noted.		
Technical Corrections and Specific Comments #25	P4-87, Table 4.4-1: There are some hatchery-origin sockeye returning from net-pen releases in Lake Wenatchee and from a small program at Cassimer Bar on the Okanogan River operated by the Colville Tribe. I believe wild broodstock are used. The Snake River sockeye run is almost entirely a product of captive rearing. Some number other than "0" seems appropriate.	Confederated Tribes and Bands of the Yakama Nation	The language has been modified.
#26	Page ES6 Table ES-2 This table is confusing. In the Columbia River Alternative 2 section, too many scenarios are mixed together. It is difficult to follow. In the Human Environmental Effects section for Alternative- 2, it is not clearly stated what the rationale for restricting tribal fisheries would be (or if tribal fisheries would be required to be selective – note: on page 2-17 it mentions that selective gear would only be recommended for tribal fishermen). A statement should be inserted indicating that there would be a negative effect on the trust relationship between Indian Nations and the Federal Government. In the Cumulative Effects section of Alternative 2, there is a bullet for "selective fisheries implemented to reduce impacts to listed fish." This section should be clarified. The allowable harvest rate is key. If selective fisheries are implemented, but the harvest rate on listed fish remains the same, as under the status quo scenario then impacts are not reduced, they are the same. (i.e.: if Columbia River fisheries are managed under status quo non-selective fisheries to keep the overall impact to Snake River Fall	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The table is provided as a summary. Details and clarifications can be found in the appropriate sections. Language has been modified under Alternative 3.

Comment Topic and Number	Comment	Commenter	Response
	Chinook to no more than 31.29% and if selective fisheries are implemented to keep impacts to no more than 31.29%, then the impact on listed fish is the same. The only thing that changes is the ability to access marked fish at a potentially higher impact rate. Any comparison of selective and non-selective fisheries should be clear about this.) In the Human and Environmental Effects section of Alternative 3, the bullet, "Effect on trust relationship …." should be changed to, "Negative effect on trust relationship ..."		
Technical Corrections and Specific Comments #27	Page ES10 ES.3.3.1 Change sentences referring to tribal gears to, "Set gillnets are the primary gear used in the tribal commercial fishery. Other gears used in commercial fisheries include, drift gillnets, hoop nets, dip nets, and hook and line gear. Ceremonial fishing typically uses set or drift gillnets, but may include other gears. Subsistence fisheries typically use hoop nets, dip nets, and hook and line gear, but may use gillnets in Zone 6 and occasionally use spears or gaffs in tributaries."	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
#28	Page ES10 ES.3.3.2 Alternative 1. This alternative should be clarified to indicate that for many fisheries it is currently the same as Alternative 2 and therefore there would be no difference in impacts. An example is non-Indian spring chinook fisheries. Virtually all non-Indian spring chinook fisheries (both commercial and recreational) in the mainstem Columbia River are already mark-selective fisheries. One exception is the so-called terminal fishery in the Columbia off the mouth of the Wind River that targets returning	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Selective fisheries for spring chinook are just now being phased in. However, with the exception of recreational steelhead fisheries, selective fishing was not common during the base years. Alternatives 1 and 2 are structured to provide a contrast between management strategies that rely on the use of selective methods or not.

Comment Topic and Number	Comment	Commenter	Response
	Carson Hatchery fish. Since the recommendation for the Tribes to use selective gear is non-binding, the appropriate assumption is no difference between Alternative 1 and 2 for any Columbia River Spring Chinook stocks. Most other tributary recreational fisheries are also already selective fisheries and therefore there would be little difference in the two alternatives.		
Technical Corrections and Specific Comments #29	Page ES11 ES.3.3.2 Alternative 2. This section should be clarified that for some listed stocks, mark-selective fisheries do not avoid the harvest of, but rather target listed fish. Almost all listed Snake River sockeye are mass marked. A mark-selective fishery on sockeye would only allow the harvest of listed fish along with some non-listed fish from the Wenatchee. Almost all non-listed sockeye in the Columbia are wild fish and are not marked. Many listed Upper Columbia steelhead are mass marked. Mark selective steelhead fisheries in the mainstem Columbia or in the Upper Columbia tributaries target these fish. Some listed Snake River basin spring/summer chinook are also mass marked. Mark selective fisheries in the mainstem Columbia or in the Snake River and tributaries where these fish occur also target these listed fish. Alternative 2 would be correct as written if as part of the requirement to mass mark all non-listed hatchery fish there was also a requirement to **not** adipose clip any listed fish. Is this the intention of Alternative 2? If so this should be stated. Not marking hatchery fish deemed important for recovery would in many cases be contrary to current NMFS policy. In many cases such as listed Wells Hatchery stock steelhead, captive brood spring	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Alternative 2 does not presume that selective fisheries would be implemented in all cases. Selective fishing still needs to be evaluated on a case-by-case basis. Commenter notes some cases where use of selective fisheries would be inconsistent with conservation objectives. If a particular selective fishery does not provide a positive or neutral conservation benefit, it would not be implemented under alternative 2.

Comment Topic and Number	Comment	Commenter	Response
	chinook at Lookingglass Hatchery, and supplementation fall chinook above Lower Granite Dam, the fish are either 100% mass marked or marked at very high rates. This should be clarified as well. What is NMFS policy under Alternative 2? There is a statement, "Option B would not allow harvest of surpluses of naturally spawning fish". This should be clarified that it is referring to non-listed naturally spawning fish such as Hanford Reach fall chinook and Clearwater River spring chinook. Would this restriction apply to tribal fisheries? If so, there should be a statement of the legal authority supporting such a restriction.		
Technical Corrections and Specific Comments #30	Page 2-13 Section 2.2.3.1 Alternative 1 – No Action. "CRFMP conservation objectives are summarized in Table 2.2-3." Table 2-2.3 shows specifications of management measures rather than specific conservation objectives. Alternative 1 would more appropriately be described by using the current management agreements that are agreed to by the *U.S. v. Oregon* Parties. These include the sliding scale harvest matrix for spring chinook, and the harvest rate plans for summer chinook, sockeye, fall chinook, and steelhead. These harvest rates should be shown in the DPEIS. Even though current management agreements are of short duration, the harvest rates have generally been in place for some time and would not be expected to change dramatically in the near future. It should be specified that under Alternative 1, most non-Indian recreational fisheries and some non-Indian commercial fisheries are already mark-selective	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	language related to Table 2.2-3 modified; Alternative 1 uses management measures that were applicable and agreed to by the parties for the 1996 – 1998. These agreements were generally extended to cover 1999 as well. Management provisions for summer and fall season fisheries have not changed substantially since then. Spring season fisheries are now subject to a more detailed abundance based harvest rate schedule. However, the allowable harvest levels are still centered around 7% - 9% range allowed under the earlier agreements with more or less harvest allowed depending on the status of the listed fish. Non-treaty fisheries are still constrained in most cases to 2% as was the case under earlier agreements. Tribal spring season harvest rates may increase to a maximum of 15% under the most recent agreements when returns are substantially higher, but this change does not substantially affect the contrast provided by the described alternatives.

Comment Topic and Number	Comment	Commenter	Response
	fisheries. It should be clearly stated that in these cases, there is no difference between Alternatives 1 and 2. There would be no change in impacts to natural stocks. There is a statement that Alternative 1 for the Columbia River Basin management area is based on observed management measures for the baselines analyzed. This statement includes a footnote 12, which states that Alternative 1 is derived primarily from the 1996-1998 management agreements. This is confusing since baseline 1 is from 1980 through the early 1990's (the year should be specified). And baseline 2 is from 1994-1997. Is the DPEIS comparing the management objectives and limits in place in 1996-1998 with the run sizes in earlier years? If so, this should be clarified. And again the management agreements in place in 1996-1998 are not the appropriate agreements to use for a "No Action" alternative.		
Technical Corrections and Specific Comments #31	Page 2-14 Section 2.2.3.2 Alternative 2. This section indicates that the only change between Alternative 1 and 2 is the imposition of mark-selective fisheries (i.e., "Alternative 2 for the Columbia River Basin considers the environmental consequences associated with live capture and selective as well as the use of terminal fisheries"). It does not say anything about mandating reduced harvest related impact rates on wild stocks. Therefore, the reader must assume that the allowed harvest impact rates assumed under Alternative 1 would also be the allowed harvest rates under Alternative 2. It follows that in general the observed changes between Alternatives 1 and 2 would be a general increase in harvest of marked hatchery fish while maintaining the same harvest related impacts on wild stocks.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language was added to clarify that the conservation constraints applied under alternatives 1 and 2 would be the same. Commenter questions why selective fisheries would be applied for non-listed coho. The use of selective fisheries is not limited to application to listed species. The NEPA analysis takes a broader view related to the benefits of listed and unlisted fish. Although considerable attention is paid to listed fish, the PEIS considers the effects of alternative strategies on all species and stocks.

Comment Topic and Number	Comment	Commenter	Response
	There would be some conversion of landed catch of wild fish to include release mortality of wild fish. This is an important point and should be stated clearly. If it is the intention of the authors to compare status quo with decreased harvest impacts and no harvest impacts, it would not be necessary to include any reference to mark-selective fisheries in the document at all. Under "number two", the statement, "Under one option, selective fisheries in mixed stock areas would be coupled with **terminal** fisheries in areas where incidental harvest of listed ESUs is exceptionally low. (e.g. Hanford Reach)." This statement should clarify the word terminal. It appears that the intent is that the terminal fishery would **not** be selective, but that is not entirely clear. The statement, "A second option would consider only the use of live capture, selective harvest techniques in mixed stock areas." should also be clarified. Does this option include **no** terminal area fishing or just no non-selective terminal area fishing? Assuming that the intent is no terminal fishing of any kind in areas with harvestable non-listed fish Precludes the opportunity to access these fish. The impact of terminal fisheries targeting harvestable non-listed fish on listed wild fish is arguably low but not necessarily "exceptionally low". This should be clarified and the words "Terminal fishing" and "exceptionally" should be defined. Since coho in the Columbia Basin are not listed, the DPEIS should explain the rationale for requiring in-river mark selective fisheries for non-Indians, or recommending them for the tribes. There should be some discussion under Alternative 2 that managing mark-selective fisheries **requires**		

Comment Topic and Number	Comment	Commenter	Response
	good estimation of release mortality rates. If release mortality rates are not known or are estimated incorrectly (either high or low), the effects of selective fisheries on released wild fish will be unpredictable and could present risks to depleted stocks. In many cases current release mortality rates are largely expert opinion backed to various degrees by small scale studies that were often done long ago and sometimes in areas quite different from the areas where they are applied. When mark-selective fisheries are adopted, strong effort needs to be made to assess release mortality rates to avoid the risk of unanticipated consequences to natural stocks.		
Technical Corrections and Specific Comments #32	Page 2-15 Table 2.2-3 This table appears to have left out tribal commercial fishing in Zone 6.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
#33	Page 2-16 Table 2.2-4 This table appears to have left out tribal commercial fishing in Zone 6.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #34	Page 2-17 Section 2.2.3.2 Number 3. Gear Types. It states selective gear, "…would be required for non-Tribal fishermen and recommended for Tribal fishermen.." The DPEIS should state the assumption for the adoption of the recommendation by tribal fishermen. There is legal requirement for the tribes to use selective gear.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The analysis in the PEIS assumes that the tribes would chose to use selective gear, but recognizes that there is no legal obligation for them to do so.
#35	Page 2-21 Section 2.3.2.3 Other alternative selective harvest methods or gear types are available for Columbia Basin fisheries. These include, tangle nets, traps, beach seines, purse seines, fish wheels, and dip nets.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language has been modified; Section 2.3.2 generally discusses alternative gear types that were not considered as an option for use in the fishery. Table 2.2.4 lists the gear types that were presumed available in the consideration of Alternative 2 and includes all of those listed in the comment.
#36	Page 3-67 Table 3.5-1 The column titled "Escapement Goal Met?" should be clarified to indicate that there are no currently agreed to escapement goals in *US v OR* management agreements, but a comparison to the goals in the expired CRFMP can be made.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The origin of escapement goals is variable.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #37	Table 3.5-2 This table should clarify if whose goal (i.e., state goal, or goal from expired CRFMP, etc.) is referred to. Corrections: Wild Summer steelhead Escapement at Bonneville – A- run – During 1988-1997, this escapement goal was met once in 1988. B-run - During 1988-1997, this escapement goal was met once also in 1988. The percentages shown are not correct. (source TAC A and B –Index data).	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
#38	Page 3-68 Section 3.5.2.2 Snake River Sockeye and chum were included in the first paragraph but discussions of fisheries impacts on the ESUs were omitted from this section. Was this intentional? If so, Why?	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
Technical Corrections and Specific Comments #39	Page 3-70 Table 3.5-3 Corrections/Clarifications: Table title should read "…Chinook salmon **and Steelhead** ESUs." (It left out sockeye – is this intentional?) Upper Columbia Spring Chinook – Population Trend - Should read, "long term decline, short term increasing trend (1998-2001)." Snake River Spring/summer Chinook – Population Trend – Should read, "long term low, except record high returns in 2000 and 2001." Upper Columbia fall chinook – Recent Natural Run Size – should read, 1997-2001 average run size at Lower Granite 1,103 (source TAC and NMFS preliminary 2001 estimate). Population Trend - Should read, "long term decline but increasing trend	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	since 1994." Upper Columbia Steelhead – ESU column should mention that Wells Stock Hatchery fish are listed as endangered also. Recent natural run size should be clarified to mention that the 1977-2001 average wild run size at Priest Rapids dam is 2,229 (source WDFW). Population Trend - Should read, "long term low, short term increase since 1997 with highest natural run since 1986 in 2001". Snake River Basin Steelhead. The "Recent Natural Run Size" is incorrect. The 1977-2001 average wild steelhead count at Lower Granite Dam is 17,600 not <10,000. The "Population Trend" should be corrected to read, "Long Term decline, increasing trend since 1996."		
Technical Corrections and Specific Comments #40	Page 3-77 Section 3.5.3.5. This section is a bit misleading because starting around 1997; the tribes began not only selling fish to commercial buyers (data shown in figure 3.5-4), but also selling fish direct to the public. These sales have grown, making up an important component of the ex-vessel value. The section should also clarify that not only total landings have declined, but the price per pound has declined sharply over the same time period. This is largely due to competition from farmed salmon.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language has been modified in Section 3.5.3.8.

Comment Topic and Number	Comment	Commenter	Response
#41	Page 3-89 Section 3.5.3.10 Commercial Fisheries Clarification – Some mention should be made that the Yakama Nation sometimes authorizes commercial fisheries in some tributaries and terminal fishing areas such as the Klickitat River and Drano Lake. Commercial fishing in these areas is usually dependent on numbers of returning hatchery fish.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
Technical Corrections and Specific Comments #42	Page 3-95 Section 3.5.3.10 Fisheries Clarification – Some mention could be made that fisheries are important to the Nez Perce tribe in the same ways as for the other tribes. The Nez Perce Tribe participates in commercial, ceremonial, and subsistence fisheries in Zone 6 as well as fisheries in much of the Snake River Basin. Fisheries in the Snake River and its tributaries are typically ceremonial and/or subsistence, but the tribe may authorize commercial fisheries usually targeting abundant returning hatchery fish.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
#43	Page 4-88 Section 4.4.1.2 Under Alternative 1, there is discussion comparing the two baselines. It seems like there is little likelihood of the future being very much like either baseline 1 or 2, which seems to make the entire analysis questionable. Assuming there is validity to the baselines, the total harvests are questionable and possibly incorrect (see comments on table 4.4-2). Under Alternative 2: Again, it should be clarified if the DPEIS assumes that the tribes use selective gear or not. The harvests under Alternative 2 are also questionable (see comments on table 4.4-2). There	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The baselines are not meant to predict future conditions, but provide plausible scenarios for relative comparison of alternatives. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1.

Comment Topic and Number	Comment	Commenter	Response
	is a statement, "A relatively large number of hatchery steelhead would escape fisheries under the effort levels assumed in Alternative 2, Option A." Why is this? Steelhead sport fisheries are assumed to be selective fisheries under Alternative 1 as well as Alternative 2. If the tribal fisheries do not change to selective fisheries under Alternative 2, then the effort and impacts should be the same. If the tribal fisheries did change to selective fisheries, then shouldn't fewer hatchery steelhead escape fisheries, not more?		
Technical Corrections and Specific Comments #44	Page 4-89 Table 4.4-2 This table is confusing. It is very difficult to guess how these assumed "harvests" were calculated or if they are correct. Some of the numbers are suspicious and appear to likely be incorrect. For instance, under Alternative 1, the tribal Zone 6 commercial harvest is assumed to be 1,500 sockeye. Under Alternative 2, Option A the harvest is shown to be 3,400 and under Option B it is shown to be zero. Since the DPEIS is unclear as to whether it assumes tribal fishing would follow the "recommendation" to use selective gear it is hard to know what the effect would be of Alternative 2. Since the difference between Option A and B is only whether or not fisheries are allowed in terminal areas, the catches shown should be the same. They are not. Alternative 1 should show the catch under status quo non-selective fisheries. If the tribes did not fish selectively under Alternative 2, the catch should be the same as shown in Alternative 1. It is not. If the tribes did fish selectively, with requiring the release of all non-marked (and incidentally primarily non-listed wild fish), the catch would drop nearly to zero, because very few marked (and	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume that the tribes use selective gear and release unmarked fish. For sockeye Option B, Baseline 1 assumes that sockeye are released except in the Tributary sport fishery. Under Option A, Baseline 1, fish in excess of escapement needs are distributed across fisheries in terminal areas. Column headings are modified. For steelhead, catches are higher for Alternative 2, Option A than Alternative 1 also because of presumed increased harvest in terminal areas.

Comment Topic and Number	Comment	Commenter	Response
	primarily listed) sockeye are caught in the Zone 6 fishery. If the DPEIS assumes that sockeye fishing would be managed as a "reverse" mark-selective fishery in which listed marked fish are released and wild non-listed fish are retained, it should be clear about this. In this case because of the very low numbers of marked fish, the catches would be almost the same as in Alternative 1. For the Zone 1-6 and tributary sport fishery, the steelhead catches in Alternative 1 should be the same as in Alternative 2 option A since under both scenarios because the fisheries in question are selective. Why are these numbers different? For the Zone 6 C&S fisheries and Tribal C&S fisheries, are these fisheries assumed to be mark-selective? If not, why are the catches different between Alternative 1 and Alternative 2 Option A. They should be the same. If the fisheries are assumed to be selective, why do most catches go down except for sockeye, which goes up for the Zone 6 C&S fishery. Shouldn't these catches increase (except for sockeye) if the DPEIS is assuming the tribes are harvesting hatchery fish at a higher rate than under Alternative 1. Is the column marked Tribal C&S tributary catches? Whatever it is supposed to represent, the tribes utilize all stocks in their areas for ceremonial and subsistence use. There should be some assumption of catch for all of the upper river chinook, coho, and steelhead stocks. The same questions apply to Table 4.4-3. Given that for most of the table it is not clear how the numbers are derived and for the few numbers that it does seem clear that this raises questions about the entire DPEIS analysis.		

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #45	Page 4-92 Section 4.4.1.2 Alternative 2, Option A. There is a statement: "This analysis assumes that all fish that exceed the escapement goal can be harvested in terminal fisheries." Again it is not clear if the analysis assumes whether the terminal fisheries are mark-selective or not. It should be made clear in this section that the idea that terminal fisheries are going to be expanded enough to catch even a modest amount more fish than current terminal fisheries do is extremely unlikely. There is probably very little room for expansion of terminal tribal commercial fishing, because there are not enough sites where commercial fishers could access enough commercial quality fish beyond current practices. There is virtually no chance of being able to start non-Indian commercial fishing in terminal areas for logistical and other reasons. Sport fisheries are often quite liberal under the status quo in terminal areas. Increasing season lengths is often impractical because of run timing. Increasing bag limits may work some but are unlikely to be increased too high. There are often not enough accessible points to increase sport fishing effort much beyond current levels. Because of these factors the information shown in Table 4.4-4 is largely conjecture and is therefore meaningless.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Comment points out that the ability to access additional fish in terminal areas is likely limited. This point is made in Section 4.4.1.2 and emphasized by heading of Table 4.4-4 which lists the numbers as estimated maximum additional harvest …, and again in the table footnote.
Technical Corrections and Specific Comments #46	Page 4-93 Table 4.4-4 The title is incorrect. It should read, "Estimated maximum additional harvests of hatchery salmon, "healthy" fall chinook, **and "healthy" wild sockeye** under Alternative 2, Option A." The headings are not very clear. What is the column "Natural Releases"? What is the difference between	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	"Incidental Mortality" and "Total Incidental Mortality"? Where is this assumed incidental mortality come from? Isn't this table discussing the option of increased directed terminal fishing? If so, why is there incidental mortality? This table should come with a large notation indicating that it is largely conjecture and that increasing terminal fishing to this degree is extremely unlikely. The assumed escapement goal shown for upriver natural bright fall chinook above Snake River confluence is not correct. The goal of 43,500 is at McNary Dam not above the Snake River. It is also a combined goal for fish returning to fall chinook hatcheries above McNary as well as wild spawning fish. This should be corrected and clarified. If under Alternative 2, fisheries below the Snake River could retain only hatchery fish, and fisheries in the Hanford Reach could retain wild fish, then the McNary goal would need to be adjusted. The area between McNary Dam and the mouth of the Snake River is generally open for fall chinook sport fishing. Does the analysis assume that this fishery is part of the Terminal fishery? If it is part of the terminal fishery, then there would still be impacts to Snake River fall chinook. If it is not, it would make it that much more difficult to harvest the "surplus for harvest" fish.	the Columbia River Basin	
Technical Corrections and Specific Comments #47	Page 4-94 Section 4.4.1.2 Alternative 3. This section is misleading and/or incorrect. There is a statement, "Natural populations would rebuild more quickly. Absent harvest, the need for survival improvements in other life stages would diminish." If the DPEIS claims that status quo harvest levels	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	are high enough to change time to recovery in any significant degree, some data or analysis demonstrating it should be included. Many natural stocks in the Columbia have lambdas less than one with **or** without harvest. For those with lambdas greater than one, eliminating harvest would not increase lambda to the degree that recovery time would be decreased significantly. Without significant increases in survival from other life stages rebuilding and recovery is simply not possible with or without harvest. These sentences should be either clarified and corrected or simply deleted.	the Columbia River Basin	
Technical Corrections and Specific Comments #48	Page 4-94 Section 4.4.1.3 Alternative 2 The statement: "The natural component of Columbia Basin Chinook Runs ranges from 0 to 60 percent", is somewhat misleading, if not erroneous. If you include some hatchery stocks like Spring Creek fall chinook or Carson spring chinook, then maybe the statement is true that the natural component is 0, but given the much broader stock levels that have been discussed in the DPEIS, the statement is wrong. The statement should be clarified or corrected. The document states that under Alternative 2, selective fisheries are implemented and that fishing mortality on the natural runs would be reduced by approximately 90%. The document needs to be clear if it assumes tribal fisheries follow the recommendation to use selective gear. If it does assume this, then while it is possible that impacts to natural stocks might be less, it is not guaranteed. It completely depends on the allowed impact limits on natural fish. If the Alternative 1 impact to Snake	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language has been modified to address the comment. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1.

Comment Topic and Number	Comment	Commenter	Response
	River Summer Chinook is 2%, then there is no reason that if selective fisheries are implemented that the impact rate to summer chinook couldn't still be managed at 2%. Fisheries targeting marked hatchery fish continue until the allowed incidental impact on the natural run is reached. This is how mark-selective fisheries have generally been implemented. If on the other hand the assumption in Alternative 2 is that the allowed impact rate on natural stocks would be reduced, then this should be made clear. If Alternative 2 is simply the imposition of mark-selective fisheries with no change in the allowed impacts on natural stocks, then this should also be made clear. If the allowed impacts on natural stocks remains at Alternative 1 levels, then the only result of Alternative 2 would be an increase in catch of hatchery fish with no change in the impacts to wild fish. If Alternative 2 assumes a reduction in allowed harvest rate on natural stocks, then mark-selective fisheries are not necessarily necessary to achieve that. Fisheries assumed under Alternative 1 could simply be managed for reduced harvest rates to the required levels. Catches of natural and hatchery fish would both decline accordingly. The point is that either mark-selective or non-selective fisheries can be used to achieve a desired impact rate on a natural stock provided that release mortality rates can be estimated correctly. The introductory paragraph on this page should be re-written to clarify these points.		
Technical Corrections and Specific Comments	Page 4-95 Tables 4.4-5 and 4.4-6 These tables have separated Snake River Spring/Summer ESU into two categories, but combined three steelhead ESUs in one. There is no	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska,	These tables provide examples of the effects on escapement of implementing selective fisheries. The stocks shown provide examples. Not all stocks were included. Language was added in Sections 2.2.3.2 and 4.4.1.1 to

Comment Topic and Number	Comment	Commenter	Response
#49	section on the listed Upper Columbia spring chinook ESU. This is confusing. Based on the information in the DPEIS, the incidental mortality rates shown for Alternative 2 are incorrect and misleading. In the description of Alternative 2 provided in Section 2.2.3.2, there is no mention of a requirement to reduce impact rates on natural fish only that selective gears be used. Therefore one would assume that fisheries would proceed until the status quo impact limits on natural fish would be reached. The result might be that substantially higher numbers of hatchery fish would be harvested but the impact on natural stocks would be **exactly the same**. These tables should be corrected.	Washington, Oregon, and California, and in the Columbia River Basin	clarify that Alternative 2 assumes that selective fisheries in mixed stock areas were implemented assuming that wild stock impacts would be reduced. The number of fish encountered was assumed to be the same with wild fish released subject to a 10% mortality rate.
Technical Corrections and Specific Comments #50	Page 4-96 Section 4.4.1.3 Upriver Fall Chinook. The section indicates various numbers of wild fish would be released in Zone 1-6 fisheries. Under Alternative 1 the allowed harvest rate is the allowed harvest rate on the wild fish. Does Alternative 2 assume that fisheries would be allowed to only retain hatchery fish but that they would still allow status quo impacts on the Hanford Brights? If so, in many years there would be so many Hanford Brights that all hatchery fish could in theory be harvested which would not allow hatchery egg take goals to be met and the allowed harvest rate on Hanford Brights would probably not be met. So, in this case Alternative 2 would probably see a reduction in the impact rate on wild fall chinook. There is a statement: "Option A assumes that terminal fisheries would be implemented that target upriver fall chinook in the Hanford Reach area." There should be a clarification that in most years it would not be possible to harvest anywhere near the	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language included in Section 4.4.1.2, Alternative 2, Option A and elsewhere acknowledges potential benefits of terminal fisheries are maximum, and benefits would be less to the degree that all surplus fish cannot be harvested.

Comment Topic and Number	Comment	Commenter	Response
	number of harvestable fish present in the Hanford Reach. Sport fisheries are already generally quite liberal. There is probably little opportunity to realistically expand them. There are limited access points and the area is somewhat remote to attract additional fishers. The Yakama Nation has experimented with commercial fishing in the Hanford Reach in the past and found it generally unworkable. The area is not conducive to gillnetting and the fish are in only marginally commercially marketable condition. It is very unlikely that a significant commercial fishery could ever be developed there.		
Technical Corrections and Specific Comments #51	Page 4-96 Section 4.4.1.3 Upriver Summer Chinook. Does this section refer to Snake River Summer Chinook as Table 4.4-5 refers to? This should be clarified. Assuming it does refer to Snake River Summer Chinook, the 60% natural spawning rate is incorrect. Based on TAC data for the 88-97 time period the percentage is only 50%. The Zone 6 tribal C&S harvest during this period ranged from 57 to 1499 with an average of 376 (Source TAC). The section fails to mention that during this period the Zone 1-5 impacts range from 22 to 290 with an average of 75. Some of the Zone 1-5 impacts are incidental impacts to the selective sport fishery for steelhead. The rest is incidental impacts in the commercial sockeye and shad fishery. Even if the section refers to all upriver summer chinook, the wild proportion and impacts shown are incorrect. The percent wild would be less than 60% and the harvest impacts would be greater. Some documentation for the percentage used should be included. The statement: "Alternative 2 would reduce the average incidental C&S mortality to 50	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Analysis shown in tables 4.4-2 and 4.4-3 refers to Upper River Summer Chinook as indicated. The analysis in tables 4.4-5 and 4.4-6 is separate and focuses on key stocks and the potential changes to escapement for those stocks. Data are from ODFW/WDFW 1998. The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	fish for Baseline 1 and 140 fish for Baseline 2." is incorrect. Even if the tribes adopted selective fishing under Alternative 2, the C&S catch would most likely increase as more of the plentiful and nearly 100% mass marked hatchery summer chinook were caught while the wild fish impacts stayed the same. The section should indicate that Zone 1-5 catches would stay the same or increase and the wild fish impacts would probably be the same. The sport fishing catches would stay the same assuming the fishery remains a selective steelhead fishery. They would increase if a selective summer chinook fishery were added. In either case the wild fish impacts could be managed to stay the same. The Zone 1-5 commercial impacts would stay the same because the shad fishery would be unaffected by this DPEIS. It already requires the release of summer chinook. The sockeye fishery has been managed as a reverse mark-selective fishery, so hatchery sockeye are released. The statement: "Some of the released fish would augment escapement after accounting for release mortality and subsequent passage through the dams.", is incorrect. There would not be any extra fish to augment escapement assuming that no change is made in the harvest rate on wild fish. (Again, analyzing the effects of reduced harvest rates on wild fish is a completely separate analysis from that of analyzing the effects of the imposition of selective fisheries.)		
Technical Corrections and Specific Comments #52	Page 4-96 Section 4.4.1.3 Upriver Spring Chinook. Does this section refer to Snake River Spring Chinook as Table 4.4-5 refers to? This should be clarified. Assuming it does refer to Snake River Spring Chinook, the 35% natural	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington,	Analysis shown in tables 4.4-2 and 4.4-3 refers to Upper River Spring Chinook as indicated. The analysis in tables 4.4-5 and 4.4-6 is separate and focuses on key stocks and the potential changes to escapement for those stocks. Language has been added from previous comments to better explain assumptions of the analysis.

Comment Topic and Number	Comment	Commenter	Response
	spawning rate is correct, but if it is referring to all upriver spring chinook it is not (Based on TAC data for the 88-97 time period). If the section refers to all upriver spring chinook then the proportion wild is much less. The statement, "…as high as 95% in terminal areas where harvests have been allowed in recent years." This statement should be documented. In virtually any case, since the listings began, harvests in terminal areas with listed fish are only allowed if directed at abundant returning hatchery fish. This would mean that in any area with terminal harvest the proportion of fish present that are wild fish would be fairly to very low. In many terminal areas the proportion wild is very high, close to 100%, because they are upstream of the hatcheries. There are stray hatchery fish in many areas but the proportions are often not high. This sentence should be clarified and corrected. Footnote 10 needs to be clarified. Again, fisheries for spring chinook are managed with harvest rates on wild stocks. If the tribal C&S fishery used selective gears, it would simply harvest more marked hatchery fish while keeping wild fish impacts the same. The difference between Alternative 1 and 2 would be that landed catch of wild fish under Alternative 1 would be turned into release mortality under Alternative 2. There would be no change in impacts so there would be no 2,200 fish released alive per year. This sentence should be corrected.	Oregon, and California, and in the Columbia River Basin	The language has been modified.
Technical Corrections and Specific Comments #53	Page 4-97 Section 4.4.1.3 Upriver Summer Steelhead. The document states there would be no difference in sport fishery impacts between Alternative 1 and Alternative 2, Option B. Would this not be also true for Option A? There is a	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington,	Assumptions used in the analysis are outlined in Sections 4.4.1.1 and 4.4.1.2. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume that the tribes will participate in selective fisheries.

Comment Topic and Number	Comment	Commenter	Response
	statement: "Commercial Tribal and mainstem C&S fishermen combined would release 12,200 and 3,400 wild steelhead annually for Baselines 1 and 2, respectively. A significant portion of these would accrue to escapement." This statement is incorrect for three reasons: 1. Tribal harvests are managed for harvest rate impacts on wild stocks. If the tribes did switch to mark-selective fishing in the mainstem, the harvest of hatchery fish would increase and the impacts to the wild fish would be exactly the same. 2. Since the DPEIS states that mark-selective gear is only recommended for tribal fishers, it is simply conjecture to assume compliance. The DPEIS should be very clear about this. 3. Any wild fish not harvested still have to make it through the hydro-system. Claiming a significant portion make it may be an exaggeration depending on flow conditions. The sources of the 12,300 and 3,400 fish released should be identified.	Oregon, and California, and in the Columbia River Basin	
Technical Corrections and Specific Comments #54	Page 4-97 Section 4.4.1.3 Lower River Summer Steelhead. The same comments in the above section apply to the language regarding lower river steelhead. The sources of the 30 fish released should be identified.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language has been added from previous comments to better explain assumptions of the analysis. Estimates for the number of fish released come directly from tables 4.4-2 and 4.4-3.
#55	Page 4-97 Section 4.4.1.3 Coho Salmon. Since Coho salmon are not listed, why would Alternative 2 or 3 apply to coho? The sources and calculations of the numbers of fish released should be identified as well as which fisheries they are from. There should be a notation	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and	The analysis assumes that selective fisheries would be implemented for coho regardless of their listing status. Estimates for the number of fish released come directly from tables 4.4-2 and 4.4-3. For example, 32,600 fish released is the difference between total coho harvest under Alternatives 1 and Alternative 2, Option B.

Comment Topic and Number	Comment	Commenter	Response
	that for coho above Bonneville, the proportion wild is very small, but many of these hatchery origin fish not including the Klickitat coho are being used in recovery programs.	California, and in the Columbia River Basin	
Technical Corrections and Specific Comments #56	Page 4-97 Section 4.4.1.3 Sockeye Salmon. If this section is supposed to address all Columbia Basin sockeye, it should address the effects on the Wenatchee and Okanogan stocks as well as the Snake River stock. The section states that four additional sockeye would migrate past Lower Granite Dam. The document does not say where these fish would come from. During the 1988-97 period the estimated numbers of Snake River Sockeye at the mouth of the river ranged from 1 to 43 with and average run of 9. In eight of those years the harvest impacts were less than 1. In one year the impact was 1 and in one year (with the largest run size) the impact was 21. (TAC data) It is hard to imagine how changing harvest strategies would produce and average of 4 fish per year when status quo fisheries normally have no impact on this stock. The document should clarify how this is possible. The section should clarify how the DPEIS envisions mark-selective fisheries under Alternative 2 being utilized. If conventional mark-selective fisheries were used for sockeye fishing, the endangered Snake River Stock would be targeted, because they are mostly hatchery fish and almost all mass marked. The Wenatchee and Okanogan stocks are almost all wild fish and are marked at very low rates but make up all of the harvestable fish. Does the DPEIS intend that Alternative 2 would include fisheries that target endangered sockeye and release harvestable wild fish?	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified. The analysis assumes that all sockeye caught in mixed stock areas will be released. Sockeye from the upper Columbia are primarily wild fish and are unmarked. All sockeye from the Snake River are listed as endangered. Those from the captive broodstock program may be released, but obviously would not be targeted for harvest.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #57	Page 4-98 Section 4.4.1.3 Alternative 3 – No Incidental Take. This section should include language that indicates that while natural spawning escapements might be somewhat higher with no fishing, that this increase in escapements would not in and of it self be sufficient in almost any case to recover natural fish populations.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
#58	Page 4-98 Section 4.4.1.4 Listed ESUs: The document fails to include discussions of the Snake River Steelhead ESU and the Columbia River Chum ESU. These need to be included. If they are not included, there should be some discussion included as to why NMFS thinks this DPEIS would fulfill NEPA requirements regarding these ESUs.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
Technical Corrections and Specific Comments #59	Page 4-99 Section 4.4.1.4 Upper Columbia River Spring Run ESU: The harvest rate is incorrect. The average in-river harvest rate from 1988-1993 (Baseline 1) was 10.5% so adding any ocean fishing mortality would increase this harvest rate to above that. The estimated ocean fishery impacts should be stated. The average in-river harvest rate from 1994-1997 (Baseline 2) was 7.1%. There is a sliding scale harvest matrix that is currently in use that should be reference for expected Alternative 1 harvest rates. Under Alternative 2, since the DPEIS indicates the only change is the imposition of mark-selective fisheries and not a decrease in the allowed harvest rate on natural fish, there would be no change in the	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The inriver harvest rate for Upper Columbia River spring chinook was approximated, but not modeled specifically. Assumptions used in the analysis are outlined in Sections 4.4.1.1 and 4.4.1.2. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume that the tribes will participate in selective fisheries.

Comment Topic and Number	Comment	Commenter	Response
	harvest mortality on this ESU. The only difference would be that some of the non-Indian landed catch would be converted to incidental release mortality. However, if Alternative 1 is supposed to deal with "No Action" from current management, Alternative 1 already assumes non-Indian selective sport and commercial fisheries on the ESU. The DPEIS should not assume the tribes would implement mark-selective fisheries. So in reality, Alternative 1 and 2 are exactly the same for this ESU.		
Technical Corrections and Specific Comments #60	Page 4-99 Section 4.4.1.4 Snake River Fall Run ESU. This section should be clarified to indicate that the current harvest rate limit on this ESU is 31.29% and that the wild run size has been increasing since 1994. Under Alternative 2, the in-river harvest rate limit would not change. The observed harvest rate might or might not decrease somewhat depending if there is sufficient hatchery fall chinook production available to increase the incidental impacts on this ESU to 31.29%. It is extremely unlikely that the observed harvest rate would decline to 2-4%. This statement should be corrected or some documentation should be included as to how it is calculated. There should be some discussion of the fact that if Alternative 2 occurred NMFS would have to end its requirement to mass mark much of the Snake River fall chinook supplementation program to avoid targeting listed fish in fisheries.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The 29% harvest rate reflects the standard assumed from agreements during the 1996 – 1998 that are only modestly different from those used currently (31.3%). Assumptions used in the analysis are outlined in Sections 4.4.1.1 and 4.4.1.2. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume that the tribes will participate in selective fisheries. Further discussion related to Snake River fall chinook is included in Section 4.5.2.3.
#61	Page 4-99 Section 4.4.1.4 Snake River Spring/Summer Run ESU. This section is very misleading and should be re-written. It should state, "The harvest rates under alternatives 1 and 2 would be the sliding scale	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington,	As explained in Section 2.2.3.1 the harvest rate limits used in the analysis were derived from Agreements in place from 1996 – 1999 for Snake River spring and summer chinook. Observed harvest rates during the base years were in the range of 6% - 7%. Assumptions used in the analysis are outlined in Sections

Comment Topic and Number	Comment	Commenter	Response
	matrix for spring chinook and fixed rate for summer chook in the agreed to US v. Oregon Interim Management Plan. Observed harvest rates during Baseline 1 (1988-93) were an average of 7.9% (TAC data) with most of the impacts occurring in Tribal Fisheries. During Baseline 2 the observed harvest rates were an average of 5.7%(TAC data) with most impacts occurring in tribal fisheries. Because under status quo conditions, virtually all non-Indian fishery impacts are either from selective sport or commercial fisheries or non-target commercial fisheries, and the tribes would not be expected to impose mark-selective fisheries, there is no difference in fisheries between Alternative 1 and 2. Since the management limits would be the same, there would be no difference in impacts." The section on Alternative 3 should be retained. This section should also clarify if under Alternative 2 the listed hatchery portion of the ESU such as Lookingglass captive brood fish would still be mass marked. Under status quo conditions these listed fish are targeted in non-Indian fisheries.	Oregon, and California, and in the Columbia River Basin	4.4.1.1 and 4.4.1.2. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume that the tribes will participate in selective fisheries.
Technical Corrections and Specific Comments #62	Page 4-100 Section 4.4.1.4 Upper Columbia River Steelhead: The data sources used to identify expected harvest rates should be cited. They do not appear to be correct given current management of this stock. In the 2002 TAC Biological Assessment of fall fisheries, TAC estimated that Non-Indian Zone 1-5 fisheries would have a 10.2% impact on this ESU. Tribal Zone 6 fisheries would be expected to have a 7.5% impact for a total of 17.7%. Additionally, the Wanapum fishery and the Hanford sport fishery would add another 4.6% impact for a total impact of 22.3%.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Assumptions used in the analysis are outlined in Sections 4.4.1.1 and 4.4.1.2. Upper Columbia River and Snake River steelhead were combined for the purposes of this analysis to approximate the level of impact that occurred during the respective baseline periods. There some differences in detail in harvest rates for some stocks. However, this analysis is designed to convey the general trends and magnitude of effects. More detailed analysis would be appropriate for subsequent actions containing more detailed proposals. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume

Comment Topic and Number	Comment	Commenter	Response
	Since there is no specific management constraint for this ESU, impacts would be expected to vary annually. But since the overall steelhead management limit (on Wild B-Index fish) would not be expected to change between Alternative 1 and 2, then the impacts between the two alternatives would be identical. This section should also clarify that since all non-Indian fisheries are already mark-selective fisheries and the tribes would not be expected to follow the recommendation to adopt mark-selective fisheries, Alternatives 1 and 2 are identical. This would be different if the marking strategy for the endangered hatchery portion of the ESU changed. This section should clarify if under Alternative 2, NMFS would still require that much of the listed hatchery portion of the ESU be mass marked and targeted in mark-selective sport fisheries. If under Alternative 2 the endangered hatchery fish were not listed, then there would likely be a significant reduction in sport fishery impacts.		that the tribes will participate in selective fisheries.
Technical Corrections and Specific Comments #63	Page 4-100 Section 4.4.1.4 Middle Columbia River ESU: This section should be modified with language reflecting that allowed impact rates between Alternatives 1 and 2 would be the same. And that since Non-Indian fisheries are already selective and Tribal fisheries would not be expected to follow the recommendation to adopt selective fisheries, Alternatives 1 and 2 are the same.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Assumptions used in the analysis are outlined in Sections 4.4.1.1 and 4.4.1.2. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1. The analysis does assume that the tribes will participate in selective fisheries.
#64	Page 4-100 Section 4.4.1.4 Snake River Sockeye ESU: During the 1988-97 period the estimated numbers of Snake River Sockeye at the mouth of the river ranged from 1 to	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska,	The analysis assumes that all sockeye caught in mixed stock areas will be released. Sockeye from the upper Columbia are primarily wild fish and are unmarked. All sockeye from the Snake River are listed as Endangered. Those from the captive broodstock program may be

Comment Topic and Number	Comment	Commenter	Response
	43 with and average run of 9. In eight of those years the harvest impacts were less than 1. In one year the impact was 1 and in one year (with the largest run size) the impact was 21. (TAC data) The stated harvest rates are incorrect. The observed Baseline 1 (1988-1993) average harvest rate was 12% (without 1988 it was 4.7%). The observed Baseline 2 (1993-1997) average harvest rate was 4.4%. Since the management limits on the Snake River Sockeye ESU would not change under Alternative 1 and 2 there would be no change in impacts between the alternatives. Because the Snake River sockeye run is so small compared to the typical Upper Columbia run, changing from non-selective to mark selective fisheries would have little effect. Snake River sockeye are rare in the harvest. The difference in small often in single digits for landed catches and is not very different from the numbers of fish released estimated to escape after release mortality and passage loss are applied. This section should mention that most Snake River sockeye are held in a captive brood hatchery program and the wild portion of the run is miniscule to non-existent. It should clarify that even if fishery mortality were eliminated there would still be no chance to recover this stock under current conditions. The section should clarify how the DPEIS envisions mark-selective fisheries under Alternative 2 being utilized. If conventional mark-selective fisheries are used for sockeye fishing, the endangered Snake River Stock would be targeted, because they are mostly hatchery fish and almost all mass marked. The Wenatchee and Okanogan stocks are almost all wild fish and are marked at very low rates but make up all of the harvestable fish. Does the DPEIS intend that Alternative 2 would include fisheries that target	Washington, Oregon, and California, and in the Columbia River Basin	released, but obviously would not be targeted for harvest.

Comment Topic and Number	Comment	Commenter	Response
	endangered sockeye and release harvestable wild fish?		
Technical Corrections and Specific Comments #65	Page 4-100 Section 4.4.1.5 Other Salmon Stocks: Why are not all of the non-listed ESUs discussed here? Hanford Upriver Brights are not the only important unlisted stock in the basin.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The PEIS provides results for a range of generalized alternatives. Further analysis of the effects on particular stocks would be appropriate when more specific actions are proposed.
#66	Page 4-102 Section 4.4.1.6 Alternative 2. As was already mentioned, Alternative 2 only deals with the imposition of mark-selective fisheries and not reduced harvest related impact rates to natural stocks. There would only be a reduction of hatchery fish in the terminal areas. There would not be an increase in natural fish or natural fish carcasses.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Assumptions used in the analysis are outlined in Sections 4.4.1.1 and 4.4.1.2. Alternative 2 does assume a reduction in wild stock impacts as a result of implementation of selective fisheries.
#67	Page 4-103 Section 4.4.1.7 Alternative 3. Assuming Alternative 3 involves the reduction of hatchery programs, Alternative 3 could see an increase in avian impacts to wild smolts in the estuary at least in the short term as large bird colonies prey on juvenile salmon runs that are comprised of primarily wild fish.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language was added elsewhere that clarifies the assumptions of the analysis.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #68	Page 4-104 Section 4.4.2.2 Analytical Methods. In some of the previous sections it seems clear that the DPEIS assumes that Alternative 2 involved a reduction in impacts on wild fish, when in fact it only proposes switching to mark-selective gear. The methods used to calculate economic benefits are possibly suspect. Since most recreational fisheries except for fall chinook fisheries are mark-selective fisheries currently, in most cases there would not be a difference between Alternative 1 and 2. The only economic changes relative to the sport fisheries would be associated with fall chinook fisheries. As stated before, it is unlikely that sport fishing could be expanded in the Hanford reach enough to harvest the large additional escapement of natural fish that would be expected under Alternative 2. Therefore mark-selective recreational fisheries for fall chinook could result in an overall reduced catch of fall chinook and result in a decrease in the basin wide number of angler days and associated overall economic benefits. For non-Indian commercial fisheries, switching to selective gear such as tangle nets can result in decreased efficiency and higher costs to the fishermen. It may result in lower catches as well. But as observed in the spring chinook tangle net fishery, the value of the fish may actually be increased because of fewer net marks and shorter soak times. The overall change in value of the total catch may not change significantly. This of course depends on many assumptions. The DPEIS should be very careful to fully explain all assumptions in the economic analysis.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Language was added elsewhere that clarifies the assumptions of the analysis.

Comment Topic and Number	Comment	Commenter	Response
Technical Corrections and Specific Comments #69	Page 4-128 Section 4.4.2.5 Columbia River Tribal Communities: Under Alternative 2, it should be stated that it is unlikely that the tribes would follow the recommendation to use mark-selective gear.	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	Existing language reflects the uncertainty about whether the tribes will undertake a substantial change from current practice to use selective fishing techniques. Additional comments regarding assumptions about tribal participation in selective fisheries have been included in Sections 2.2.3.2 and 4.4.1.1.
#70	Page 4-129 Section 4.4.2.5 Columbia River Tribal Communities: Under Alternative 3, change the sentence, "As such, the Tribes may avoid the adverse effects…." to, "As such, the tribes would certainly avoid the adverse effects…."	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.
Technical Corrections and Specific Comments #71	Page 4-130 Section 4.4.3 Comparison of Alternatives: The statement: "Selective fishing offers the opportunity to increase fishing effort on surplus hatchery fish in mixed stock areas and on healthy runs in terminal areas while exerting relatively small impacts on non-target stocks." Should be changed to, "Selective fishing offers the opportunity to increase fishing effort on surplus hatchery fish in mixed stock areas while maintaining existing impact rates on non-target stocks." The inclusion of healthy runs in terminal areas is not appropriate in this sentence, because the harvest of healthy natural runs in terminal areas can be done with or without mark-selective fisheries in mixed stock areas. The use of, "while exerting	Columbia River Inter-Tribal Fish Commission off the Coast of Southeast Alaska, Washington, Oregon, and California, and in the Columbia River Basin	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
	relatively small impacts on non-target stocks" is inappropriate because mark-selective fisheries are not used to reduce harvest rates. They are used to access hatchery fish while maintaining existing impact rates on wild stocks. The statement: "Mass marking of chinook and coho salmon may affect current methods of salmon management because mass marking requires changing methods for gathering and interpreting data from coded wire tags…" should be changed "..does affect current methods.." There should also be discussion of the fact that these changes result in a reduction of the precision of harvest rate information on natural stocks. Any number of reports from the Pacific Salmon Commission Selective Fishery Evaluation Committee can be cited for this section.		
# 72	Page ES-1 states that the annual FMPs supplement fixed "framework" plans. The EIS should define these fixed framework plans and describe how they differ from and relate to FMPs and actions contained in this PEIS.	EPA	The Executive Summary has been substantially revised. Chapters 1 and 2 address the relationship between annual management plans and framework plans for each jurisdiction.
# 73	Page ES-1 states that alternatives discussed in this DPEIS vary with respect to management measures, but not conservation objectives. The reader is largely unfamiliar with these terms. The PEIS should define management measures and conservation objectives and provide examples.	EPA	Definitions have been added to the PEIS and can also be found in the Glossary of Terms.
# 74	The PEIS should fully describe impacts of alternatives to listed stocks consistent with ESA, MSA, and NEPA implementing regulations (40 CFR 1500.1(b), 1502.25(a and b), 1502.15, 1502.16, 1508.8)).	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. The evaluation of impacts is commensurate with the programmatic level and design of the analysis.

Comment Topic and Number	Comment	Commenter	Response
# 75	Page ES-1 uses the acronym NMFS without spelling it out initially. It should do this.	EPA	The Executive Summary has been modified to address the comment.
# 76	Page ES-1 states that the federal action considered here is NMFS review of salmon FMPs but does not state if such a review is to ensure consistency with the ESA or the MSA. The PEIS should state this.	EPA	The Executive Summary and Chapter 1 have been revised to more clearly delineate the federal actions covered in the PEIS.
# 77	Page ES-1 states that NMFS has designed this DPEIS to provide review flexibility and to provide an overview of fishing management methods and strategies. This PEIS should also state that a decision on a programmatic direction would result from this process.	EPA	The Executive Summary has been substantially revised. The PEIS identifies the preferred alternatives and comments on the anticipated outcomes.
# 78	Page ES-2 states that long-term effects are changes as a result of reduction in short-term impacts. The PEIS should state if there are sufficient assurances that no future increase in impacts would occur to only assess a reduction in short-term impacts.	EPA	The Executive Summary has been substantially revised. Chapter 1 discusses the distinction between short-term and long-term effects. The comment is otherwise unclear.
# 79	Page ES-2 states that long-term effects are qualitatively described. The PEIS should describe why.	EPA	The Executive Summary and Chapter 1 have been revised to more clearly delineate why impacts are assessed qualitatively.
# 80	Page ES-2 -The draft PEIS should use the term "human environment" as defined in 40 CFR 1508.18.	EPA	Comment was taken into consideration.
# 81	Page ES-2 uses the term "general summer season" but does not define it or state when it occurs. The PEIS should define the term "general summer season", preferably in the text and in a glossary.	EPA	The season structure for the Southeast Alaska fishery is described in Chapter 2.
# 82	Page ES-3 uses the term "terminal area experimental fisheries" without defining it. The PEIS should define the term "terminal area experimental fisheries", preferably in the text and in a glossary.	EPA	Terminal area fisheries are described in Chapter 2 in the context of the Southeast Alaska fishery.
# 83	Page ES-3 uses the acronym ITP without spelling it out earlier in the text. The PEIS should spell out ITP and define it if necessary.	EPA	The acronym for Incidental Take Permit, ITP, has been spelled out and has been defined. The definition can be found in the Glossary of Terms.

Comment Topic and Number	Comment	Commenter	Response
# 84	Page ES-3 states that under option A, surpluses of naturally spawning (unmarked) fish would be harvested in areas where the abundance of listed species is low. The PEIS should describe how areas where the abundance of listed species is low are identified.	EPA	The topic is discussed generally, but the details will be more appropriately considered in specific applications as they are proposed.
# 85	Pages ES-4 - 6 contain tables with titles that do not describe which fishery each page describes.	EPA	The Executive Summary has been revised, and the table titles have been modified.
# 86	Pages ES 4- 6 contains tables with different information or information in different formats. The PEIS should describe effects using similar parameters so that the public and decisionmaker can compare alternatives in a meaningful way.	EPA	The Executive Summary has been revised. The revised text of the Executive Summary delineates what are the effects of the proposed action and alternatives.
# 87	Table ES-2 on Page ES-4 provides numbers for Baselines 1 and 2 but does not describe what these numbers mean. The PEIS should create a context by which readers can understand numbers.	EPA	The Executive Summary has been revised. The revised text of the Executive Summary delineates what are the effects of the proposed action and alternatives.
# 88	Table ES-2 on Page ES-4 states that NMFS jeopardy standards met for all ESUs. The PEIS should contain evidence supporting this conclusion.	EPA	Additional language addressing this point is included in Chapter 1.
# 89	Table ES-2 on page ES-4 should spell out E.R.	EPA	The acronym Exploitation Rate, E.R., has been spelled out and has been defined. The definition can be found in the Glossary of Terms.
# 90	Table ES-2 on page ES-4 should define the term “escapement”.	EPA	A definition for “escapement” has been added to the PEIS and can also be found in the Glossary of Terms.
# 91	Table ES-3 on page ES-5 states that option A would increase impacts on listed Lower Columbia River and Puget Sound ESUs while reducing impacts to other listed ESUs. The PEIS should describe the biological rationale for inequitably impacting Lower Columbia River and Puget Sound ESUs.	EPA	These circumstances are addressed in the body of the PEIS.

Comment Topic and Number	Comment	Commenter	Response
# 92	Table ES-3 on page ES-5 lacks the statement that "NMFS jeopardy standards met for all ESUs" for Alternative 2. The PEIS should state if jeopardy standards are met or are not met for Alternative 2 of the Pacific Coast fishery.	EPA	The Executive Summary has been revised to address the comment made.
# 93	Table ES-2 on page ES-6 should provide a context for numbers describing baselines and options.	EPA	The Executive Summary has been revised to address the comment made.
# 94	Page ES-7 describes alternatives for SE Alaska. Titles of sections dealing with specific fisheries should identify the fishery.	EPA	The Executive Summary has been revised to address the comment made.
# 95	Page ES-7 states that the management measures consist of setting an overall annual harvest quota relative to the estimated total abundance of chinook in the Southeast Alaska fishery, etc. The PEIS should state the effectiveness of these measures.	EPA	Management of the Southeast Alaska fishery is discussed in more detail in the body of the report.
# 96	Page ES-7 contains the term "Chinook Non-Retention". The PEIS should define this term in the text and in a glossary and if possible, use a more colloquial term. The PEIS should also state the mortality rate of releasing caught fish back into the ocean.	EPA	A definition for "Chinook Non-Retention" has been added to the PEIS and can also be found in the Glossary of Terms.
# 97	Alternative 2 allows greater harvest levels for Baselines 1 and 2 than Alternative 1. The PEIS should explain the rationale for this.	EPA	It is not clear what is being referred to in this comment. In some cases implementation of selective fisheries does allow for higher catches. The range of circumstances and outcomes is discussed in the PEIS.
# 98	Language on page ES-9 could be changed to simplify or add greater clarity. For example, replace "approximating" with "resembling."	EPA	The Executive Summary has been revised to address the comment made.
# 99	Page ES-9 uses the term human environment and socio-economic as interchangeable. This contrasts with the definition of human environment at 40 CFR 1508.14. The EIS should replace human environment with "Social and Economic Effects."	EPA	The Executive Summary has been revised to address the comment made.
# 100	Page ES-10 should replace "fishing opportunities" with "harvest opportunities."	EPA	The Executive Summary has been revised to address the comment made.

Comment Topic and Number	Comment	Commenter	Response
# 101	Page ES-11 describes the distribution of catch among species. Are these percentages based on prediction of species available for harvest or are they harvest goals where fishery management measures would be used to achieve. If the latter is true, the PEIS should describe these measures.	EPA	The distribution of catches among species is a consequence of the analysis and related assumptions. They are not harvest goals.
# 102	Page ES-11 does not describe effects on the conservation and recovery of listed and candidate stocks. The PEIS should describe this.	EPA	The effects are discussed, particularly in Chapter 4.
# 103	Page ES-11 states that incentives to monitor the population status of wild stocks would likely diminish. The PEIS should state why this is the case.	EPA	This comment relates to Alternative 3, the no fishing alternative. Much of the motivation for the stock assessment work is related to harvest management needs. Under Alternative 3, the need for information for harvest would be reduced.
# 104	Page ES-12 should state if tribes must cooperate with NMFS or state agencies in the management of fisheries. The PEIS should explain why tribes were not cooperating agencies in the development of this PEIS.	EPA	The Executive Summary and Chapter 1 have been revised to more clearly delineate the role of Tribes in fisheries management and the NEPA process.
# 105	Page ES-13 states that harvest has contributed to varying degrees to the decline of many depressed runs and that all factors (including harvest) must be adequate addressed for recovery. The PEIS should quantify to the extent possible the causes of stock declines and the benefits to recovery of adopting each action alternative.	EPA	This is discussed in Chapter 4, particularly under Cumulative Effects.
# 106	Page ES-13 identifies three bulleted factors affecting recovery. The list should also include the present number and condition (i.e., population viability) of salmon stocks.	EPA	A bullet has been added to the list.
# 107	Page 1-1 introduces the 1996 decision of Ramsey v. Cantor as the primary driver behind developing the PEIS. The PEIS should also describe the facts, issues, and a full description of the findings to provide background information for the reviewer and decisionmaker so that they are fully aware of the	EPA	Chapter 1 has been revised to incorporate more information pertaining to the various court cases that have affected fisheries management.

Comment Topic and Number	Comment	Commenter	Response
	court mandated legal requirements that this PEIS must fulfill. Similarly, the PEIS should describe the facts, issues and findings for United States v. Oregon which the PEIS only mentions by name.		
# 108	Page 1-2 elaborate on the term "spawning escapement."	EPA	A definition for "spawning escapement" has been added to the PEIS and can also be found in the Glossary of Terms.
# 109	Page 1-2 states that the causes of salmon decline are manifold. The PEIS should identify the causes of salmon decline and quantify those causes to the extent possible.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses on the factors contributing to salmon decline may be undertaken in the environmental review processes associated with the annual fishery management measures
# 110	Page 1-2 states that NMFS must meet its statutory obligations to protect salmonid resources. The PEIS should state if this statement addresses NMFS' statutory obligations under ESA or MSA here and throughout the document.	EPA	Chapter 1 has been revised to address this point.
# 111	Page 1-2 states that Pacific salmon fisheries affect one or more listed ESUs and are subject to review and potential constrain under the ESA The PEIS should contain supporting evidence and a demonstration that alternatives would not result in jeopardy.	EPA	As discussed in Chapter 1 all of the alternatives are presumed to be consistent with ESA requirements for survival and recovery. In accordance with Council on Environmental Quality (CEQ) regulations and guidance (Question 2 of FAQ), NMFS evaluated those alternatives that were feasible. Thus, alternatives that would not meet ESA requirements were not evaluated.
# 112	Page 1-2 states that constraint is defined under the ESA through the level of allowable take. The PEIS should define allowable take for each ESU, state the basis for these determinations, and predict allowable take for the 26 ESUs for each alternative.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses on allowable take for each of the 26 ESUs would be more appropriately addressed in the environmental review processes associated with the specific annual fishery management measures.
# 113	Page 1-5 states that NMFS must find the annual fishery management plan developed by the State of Alaska (for both State and EEZ waters) to be consistent with the Magnuson Stevens Act to	EPA	The State of Alaska has committed to manage the fishery consistent with provisions of the Pacific Salmon Treaty, the Magnuson Stevens Act, and other applicable law. The State participates in implementation of the Treaty

Comment Topic and Number	Comment	Commenter	Response
	continue deferring the management of the SE Alaska Fishery in the EEZ. The PEIS should state how this review is conducted including the NEPA process and also state how the review processes under MSA and ESA are integrated.		through its Commissioner on the U.S. section of the Pacific Salmon Commission. The PST has been reviewed and found consistent with the ESA. NMFS presumes, but also confirms annually, that the State intends to manage their fisheries consistent with the PST in particular. This is done by comparing proposed fisheries with provisions of the Treaty.
# 114	Page 1.5- The PEIS should state if NMFS reviews fisheries under ESA, MSA, or both; if the tribes require NMFS approval for their fisheries under ESA or MSA; and the importance of biological and political factors in setting fishery direction.	EPA	Chapter 1 has been modified to address this point.
# 115	Page 1-5 should provide some background information on the Pacific Salmon Treaty. Were the tribes a party to the Treaty?	EPA	Chapter 1 has been revised to incorporate more information pertaining to the Pacific Salmon Treaty.
# 116	Page 1-6 states that NMFS could carry out ESA consultation using Section 7 or Section 10 of the ESA. The PEIS should describe under which Section and with which party NMFS carried out ESA consultation historically.	EPA	Chapter 1 has been revised to provide a clearer discussion of ESA Section 7 and 10 processes.
# 117	Page 1-6 should spell out and define an ITS and differentiate it from an ITP.	EPA	A definition for "Incidental Take Statement" has been added to the PEIS and can also be found in the Glossary of Terms.
# 118	Page 1-6 should explain what is meant by "intercepting stocks."	EPA	It was not apparent where that term was used.
# 119	Page 1-6 describes the programmatic framework for FMPs. The PEIS should contain a diagram illustrating the different planning layers and the role of this PEIS in that framework.	EPA	The text, here and in later chapters, is sufficient to explain the planning layers.

Comment Topic and Number	Comment	Commenter	Response
# 120	Page 1-7 states that in recent years conservation objectives for a few stocks have largely determined the scope and conduct of fisheries in the Council management area. The PEIS should indicate if the referenced conservation objectives are based on direction in the ESA or MSA.	EPA	Chapter 1 has been revised to provide a clearer discussion of conservation objectives as relative to ESA and MSA.
# 121	The PEIS should describe in detail NMFS' participation in the management of Columbia River basin fisheries distinct from its status as a party United States v. Oregon and as a federal agency responsible for administering the ESA.	EPA	Chapter 1 has been revised to provide a clearer discussion of NMFS' role in the management of fisheries in the Columbia River Basin.
# 122	Page 1-7 states that in Ramsey v. Kantor, the Ninth Circuit Court of Appeals held that, with respect to the Columbia River basin fisheries, the issuance of an ITS is a major federal action requiring NEPA compliance. The Court ruling that issuance of an ITS is a major federal action would appear to indicate that not only in NEPA compliance required, specifically an EIS is required as the means to do NEPA compliance.	EPA	CEQ regulations and NOAA NEPA implementing procedures provide that the type of NEPA document to be prepared for any action depends on the significance of the issues relative to the particular proposed action in question. Therefore, NMFS evaluates the appropriate NEPA documentation on a case by case basis and with particular scrutiny on the significance of the issues germane to that particular proposed action.
# 123	Page 1-8 states that NMFS' duties include a variety of research and regulatory activities that affect resource use throughout the full range of salmonid's ecosystem and that directly or indirectly affect municipalities, state governments, industries, and citizens throughout the western United States. This sentence is ambiguous. The sentence should be clarified by defining what resource is used and how it is used.	EPA	Chapter 1 has been revised to provide a clearer discussion of NMFS' role and responsibilities.
# 124	Page 1-8 states that alternative approaches to fishery management using various management measures may be proposed by the jurisdictions. The PEIS should define jurisdictions.	EPA	Chapter 1 has been revised to clarify that jurisdiction refers to the various geographical fishery management areas.

Comment Topic and Number	Comment	Commenter	Response
# 125	Page 1-8 describes how the DPEIS will serve as a baseline of environmental and economic information for NMFS but does not identify the decisionmaking outcome of this NEPA process. The PEIS should emphasize how NEPA processes support decisionmaking and the final PEIS must identify a preferred alternative.	EPA	Peter- Decision response The FPEIS has identified preferred alternatives for the various fishery management jurisdictional areas.
# 126	Pages 1-10 and 1-11 state policies and standards of MSA including avoiding unnecessary waste of fish, prevent overfishing, and rebuilding overfished stocks. The PEIS should state if this direction applies to only target species or if it also applies to nontargeted species.	EPA	Neither the MSA or text in the PEIS describing the MSA make a distinction between target and non-target species. The clarification is therefore unnecessary.
# 127	Page 1-10 states that conservation and management measures shall be based upon the best scientific information available. The PEIS should describe models, their assumptions, accuracy, and limitations in greater detail along with discussions describing the array of available modeling and statistical tools and a demonstration that the model used was the best available to meet this national standard.	EPA	The use of best scientific information is one of many requirements listed in Section 1.4.1.2 in particular and 1.4.1 in general. Developing the necessary background and providing documentation that this particular requirement is being met through the array of management processes considered is beyond the scope of the PEIS which focuses on the use of alternative management strategies that could be used to meet conservation and use objectives.
# 128	Page 1-10 states that conservation and management measures shall minimize bycatch to the extent practicable. The PEIS should state if direction to avoid bycatch "to the extent practicable" applies when the bycatch is listed under the ESA. If not, the PEIS should describe the different standard.	EPA	It is self-evident that fisheries are managed to minimize the incidental catch of listed species. The generality is enforced through species-specific Incidental Take limits that are contained in associated ESA section 7 Biological Opinions.
# 129	Pages 1-13 and 1-14 describes the Marine Mammal Protection Act. The PEIS should briefly describe if analyzing the take of marine mammals or the effect of alternatives on prey availability for marine mammals is within the scope of the PEIS.	EPA	The effects on marine mammals are analyzed in the PEIS.

Comment Topic and Number	Comment	Commenter	Response
# 130	Page 1-14 should briefly describes coastal zone management programs for the four affected states and if alternatives are consistent with those programs.	EPA	Language has been added for clarification.
# 131	Page 1-14 - It might be appropriate for the PEIS to include the following Executive Orders (EOs): EO 12114 - environmental effects abroad of major federal actions, EO 12898 and EO 12948 - addressing environmental justice in minority populations and low-income populations.	EPA	Through the scoping phase of the PEIS, internal and external scoping did not identify any potential issues with regards to potential effects abroad or in regards to environmental justice communities. As a consequence and in accordance with CEQ regulations pertaining to scoping, NMFS used scoping to identify "not only significant issues deserving of study, but also to de-emphasize insignificant issues, narrowing the scope of the EIS process accordingly (1500.4(g))." Therefore, a detailed analysis on potential impacts abroad or to environmental justice communities was not warranted.
# 133	Page 1-15 states that tribal treaties guarantee Tribes fishing rights in common with citizens of the Territory. The PEIS should state if these fishing rights are to an absolute quantity, a share of the allowable fishing harvest after conservation restrictions per ESA or MSA are imposed, or a combination of these two elements.	EPA	Section 1.4.1.10 adequately summarizes the case law as 50% of the harvestable surplus applied river-by-river or run-by-run. Neither of the scenarios suggested in the comment are correct.
# 134	Page 1-16 should read "state fishery management actions in California are subject to review under CEQA regulations."	EPA	Chapter 1 has been revised to indicate that fishery management actions are subject to CEQA review.
# 135	Pages 1-16 and 1-17 describe the state management role. To enhance readability, the PEIS should similarly describe the oversight body for each state with the number of members, the duration of terms for the members, and the duties of the body.	EPA	The existing text adequately describes the state management role.

Comment Topic and Number	Comment	Commenter	Response
# 136	Page 1-18 states that NEPA compliance for the framework management plans occurred in the 1970s and early 1980s. The PEIS should state if NEPA analyses and information contained in these EISs are still relevant and still meet the MSA requirement for best available science since they are 20 years old.	EPA	Related text has been modified. As indicated plan amendments have been implemented periodically and all have been subject to further NEPA review.
# 137	Page 1-19 should spell out FRN.	EPA	The acronym for Federal Register Notice has been spelled out in Chapter 1 and added to the Acronym list.
# 138	Page 2-1 states that NMFS may suggest or require changes to a management plan if it does not adequately address conservation goals. The PEIS should state this action is pursuant to ESA or MSA.	EPA	The language has been modified.
# 139	Page 2-1 states that this DPEIS is not intended to explore NMFS' jeopardy determinations. The PEIS should address this in greater detail since impacts to ESUs from fishery decisions and compliance with ESA are the underlying issues explored in this PEIS. At a minimum, the PEIS should contain evidence (e.g., summaries of BiOps) supporting the statement that alternatives would not jeopardize listed species.	EPA	Modified language directs reader to appropriate text in Chapter 1.
# 140	Page 2-2 - The sentence "Non-Tribal commercial fishermen in the Columbia River are limited to gillnetting, traps fish wheels, seines, and other devices having been eliminated by legislation in the mid-1900s" is confusing. Please clarify.	EPA	The sentence was been rewritten to be more understandable.
# 141	Page 2-3 states that alternatives considered for analysis were developed by NMFS and cooperating agencies, as well as from oral and written public comment. The PEIS only identifies one cooperating agency, Alaska Department of Fish and Game, in previous text. In addition, the cover sheet does not include a list of cooperating agencies as required by 40 CFR 1502.11.	EPA	The cover sheet and Chapter 1 have been revised to clearly denote that Alaska Department of Fish and Game is the only Cooperating Agency assisting in the development of the PEIS.

Comment Topic and Number	Comment	Commenter	Response
# 142	Page 2-4 lists whether alternatives could effectively address conservation concerns of ESA as a criterion for which alternatives were considered for detailed analysis. Including this criterion appears to run counter to an earlier statement that this PEIS is not intended to explore NMFS' jeopardy determinations.	EPA	Revised language in Chapter 1 clarifies this point.
# 143	Page 2-4 states that Alternatives who primary effect was likely to increase direct effects (i.e., short-term) on stocks of concern were eliminated. The PEIS states that Alternative 2, Option A would increase impacts on listed Lower Columbia River and Puget Sound ESUs while reducing impacts to other listed ESUs. The PEIS should explain why this alternative meets the criterion of no increase of direct effects.	EPA	The comment is apparently referring to results for the PFMC fisheries and highlights a minor exception. As noted for the PFMC fisheries only, Alternative 2 under Baseline 1 conditions, results indicate modest increases in impacts for two of ten stocks with specific impact comparisons (see Table 4.3-7). Otherwise impacts are generally reduced under Alternative which is generally consistent with the criterion.
# 144	Page 2-4 states that it is important to point out that Alternative 3, unless necessary for reasons of conservation, is inconsistent with other legal mandates and policies related to treaty Tribal fishing rights and wise use directives. The PEIS should explain under what alternative scenario besides conservation would Alternative 3 be implemented.	EPA	As explained in Section 2.2, Alternative 3 is used to simplify the analysis by defining the outside range of possible harvest constraints. The only plausible reason for implementing the No Incidental Take Alternative would be to address conservation requirements.
# 145	Page 2-4 refers to "treaty chinook". The PEIS should explain "treaty chinook" in greater detail including its origin and its possible inclusion under ESA.	EPA	A definition for "treaty chinook" has been added to the PEIS and can also be found in the Glossary of Terms.
# 146	Page 2-4 states that the set and drift gillnet fisheries are limited to 8,600 treaty chinook salmon while the purse seine fishery is limited to 4.3 percent of the all-gear quota. The PEIS is explaining the allowable quota for the two different fisheries using two different parameters that reviewers cannot readily compare. The PEIS should describe this information using the same parameter(s). In addition, the PEIS should include population estimates for the different species (and stocks) of	EPA	Although different parameters are use, this accurately summarizes how the catch is allocated among the various fisheries. In chapter 2 the PEIS describes the alternatives. A discussion of stock specific impacts would be out of place in this section.

Comment Topic and Number	Comment	Commenter	Response
	fish found in the fisheries so that reviewers can understand the percentage of total fish that the harvest and incidental take quota allows.		
# 147	Page 2-4 states that set nets have the smallest effect of the three main types of net fisheries without describing what is the referenced effect.	EPA	As indicated in the paragraph, chinook are caught incidentally in net fisheries. Of the three net fishery types, set nets catch the fewest.
# 148	Page 2-4 should fully explain the basis for setting levels of incidental take for different fish species, especially differences in incidental take for different methods of fishing.	EPA	The premise of the question is inconsistent with how the fishery is managed. This section of the PEIS provides a general description of the alternatives. Annual catch levels are set pursuant to the Pacific Salmon Treaty. The Alaska Board of Fisheries allocates the catch between gear types.
# 149	Page 2-5 states that an inseason estimate of the abundance index is made based primarily on catch rates during the first opener. The DPEIS should characterize the accuracy of that estimate.	EPA	Section 2.2.1 describes current management practice in general terms. Commenting on the relative accuracy of inseason updates gets into a level of analytical detail that is inappropriate for this section.
# 150	Page 2-5. Please write the following in plain English. The effect on the listed stocks will vary in proportion to the aggregate abundance for the fishery. Because listed stocks are harvested at higher rates in the Canadian fisheries, which would lower overall catches through implementation of abundance-based management, there would be an overall reduction in effects.	EPA	The language has been modified.
# 151	Page2-5 should describe the revised Annex IV in more detail and generally explain how adoption of Annex IV results in no jeopardy to listed chinook ESUs.	EPA	Additional information regarding Annex IV of the Pacific Salmon Treaty is included in the following section along with references that provide more detail. The biological opinion than explains NMFS' no jeopardy determination is referenced.
# 152	Page 2-6 identifies the regulation on the size of fish that can be retained is 28 inches. The DPEIS should state if fish larger than or smaller than 28 inches can be retained.	EPA	The language has been modified
# 153	Page 2-6 states that the Pacific Salmon Treaty quota sets the overall limit on harvest of chinook and, by extension, limits take of chinook form listed ESUs.	EPA	Variance estimates of the exploitation rates are not generally available from the available harvest management models.

Comment Topic and Number	Comment	Commenter	Response
	The DPEIS should state how well NMFS can predict what percentage of chinook are from listed ESUs and how well it can check its predictions.		
# 154	Pages 2-6 and 2-7 notes that when comparing modeled harvest of the alternatives to observed harvests, it is important to note that under the abundance-based approach harvest quotas would have been higher in the majority of baseline years. Please restate this sentence in plain English and explain its ramifications.	EPA	The language has been modified
# 155	Page 2-7 states that the spring fisheries are intensively managed to maximize the harvest of Alaska hatchery produced chinook in terminal areas. The DPEIS should state how NMFS limits harvest of fish from listed stocks, the percentage of listed stocks caught, and the accuracy of these projections. Do harvesters use hatchery markings to release salmon back into the ocean or to calculate the numbers of hatchery and non-hatchery fish?	EPA	The existing text adequately describes that the fisheries are managed subject to provisions of the PST which sets catch annual quotas based on abundance. Limits of incidental take of list fish are regulated through these quotas.
# 156	Pages 2-6 and 2-7 state acceptable levels of incidental take. The DPEIS should state who monitors levels of incidental take and how accurate is this monitoring.	EPA	The existing text adequately describes that the fisheries are managed to annually established quotas. Since all fish caught are accounted for, the fisheries can be managed quite accurately.
# 157	Page 2-7 states that 21 percent of the legal-size chinook hooked and brought to boat in these fisheries die before or after being released. The DPEIS should identify mortalities for other fisheries, state whether mortality is used to calculate levels of incidental take, and state whether fish that die before being released are kept or released back into the ocean.	EPA	The existing text adequately describes how the fisheries are managed. More detail in how impacts are assessed is included in the analysis of impacts in Chapter 4. Catch Non-retention fisheries, by definition, require that all chinook be released.
# 158	The DPEIS should compare the level of incidental take from harvest activities to that arising (either directly or indirectly) from habitat loss, hydropower dams, and hatchery supplementation.	EPA	The PEIS focuses on the use of alternative fishing strategies that could be used to meet conservation and use objectives derived from existing law. Evaluation of incidental take from habitat loss, hydropower, and

Comment Topic and Number	Comment	Commenter	Response
			hatchery supplementation is beyond the scope of the PEIS. The scope of the PEIS is discussed in Chapter 1. Criteria used to narrow the range of alternatives considered are discussed in Section 2.2.
# 159	The DPEIS should characterize the need to eliminate incidental take of Snake River fall chinook in fisheries in Southeast Alaska by stating the number of fish from this stock (as well as the other listed 25 stocks) that are incidentally taken, acceptable levels of incidental take for all 26 stocks, and the basis of no jeopardy determinations based on these levels of incidental take.	EPA	Because this is a programmatic EIS designed to address broad alternatives, the kind of detail suggested by this comment is beyond its scope. How ESA requirements are satisfied is discussed generally in Chapter 1. Chapter 4 discusses the relative affects on listed fish and includes specific examples.
# 160	Page 2-9 states that conservation objectives reduce Snake River fall chinook effects. The DPEIS should clarify what is meant by effects. Is it mortality?	EPA	The language has been modified.
# 161	Page 2-10 uses the acronym OCN. Recommend spelling it out since the names of other stocks are spelled out.	EPA	The acronym has been spelled out and has been added to the list of acronyms.
# 162	Page 2-10 describes different conservation objectives for different stocks. The DPEIS should explain this and, if possible, use one parameter.	EPA	The PEIS describes the relevant conservation that have been developed either through ESA consultation or that are contained in existing management plans.
# 163	The DPEIS should predict numbers of each listed stock incidentally taken during fishing, acceptable levels of incidental take, data and models used to make these predictions, margins of error associated with these predictions, more environmentally conservative measures to compensate for margins of error, and steps that NMFS can take to fill in data gaps.	EPA	Because this is a programmatic EIS designed to address broad alternatives, the kind of detail suggested by this comment is beyond its scope. How ESA requirements are satisfied is discussed generally in Chapter 1. Chapter 4 discusses the relative affects on listed fish and includes specific examples.
# 164	Page 2-12. The DPEIS should clearly state the historical frequency by which non-targeted fish are encountered and the capture-and-release mortality rate for the 26 listed stocks and different fishing methods in the three salmon fisheries.	EPA	Because this is a programmatic EIS designed to address broad alternatives, the kind of detail suggested by this comment is beyond its scope. How ESA requirements are satisfied is discussed generally in Chapter 1. Chapter 4 discusses the relative affects on listed fish and includes specific examples.

Comment Topic and Number	Comment	Commenter	Response
# 165	Page 2-12.- The DPEIS should state in greater detail how the fisheries would be managed to selectively harvest hatchery-reared fish.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses are undertaken in the environmental review processes associated with the annual fishery management measures.
# 166	Page 2-12 states that salmon and steelhead fishing occurs throughout the Columbia River basin, and listed salmon and steelhead stocks may be taken in all mainstem fisheries and in most Columbia River basin tributaries. The DPEIS should state why this is the case.	EPA	The comment is not clear. Salmon and steelhead are taken in most fisheries because they are present.
# 167	Page 2-13 describes existing management measures used for the Columbia River salmon fishery. The DPEIS should describe how well listed stocks can be identified and tracked through the system, predictions of incidental take made, identify acceptable levels of incidental take, and measure the accuracy of incidental take predictions.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses are undertaken in the environmental review processes associated with the annual fishery management measures.
# 168	Page 2-14. The DPEIS should state what the mortality rate is for harvest and release versus the direct mortality rate for the 26 stocks caught so that readers can assess the viability of this alternative.	EPA	Assumptions about catch and release mortality rates are discussed in more detail in Chapter 4, particularly section 4.4.1.1.
# 169	Page 2-17 states that Alternative 3 would result in extensive socioeconomic effects for the Columbia River basin region because it would eliminate fisheries that have been in place and relied upon for decades. The DPEIS should better clarify whether effects would be more economic or social in nature.	EPA	It is evident that eliminating fishing will result in both economic and social effects. Related details are discussed in Chapter 4.
# 170	Page 2-17 states that none of the three jurisdictions regulate, promote, or fund captive aquaculture activities; therefore, they would not incorporate captive aquaculture projects as part of a fishery management plan. CEQ regulations for implementing NEPA at 40 CFR 1502.14(c) state that agencies shall include reasonable alternatives not within the jurisdiction of the lead agency. The	EPA	CEQ guidance at 40 CFR Part 1502.14 and Question 2 (a) of the 40 Most Asked Questions provide guidance to agencies on the reasonable range of alternatives by stating a "reasonable range alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense." Aquaculture may provide fish for market, but is not a substitute for fisheries directed and health wild and hatchery stocks that

Comment Topic and Number	Comment	Commenter	Response
	DPEIS should include the alternative if it is reasonable regardless of whether or not it is within the jurisdiction of the lead agency.		are available for harvest.
# 171	Page 3-12 states that Columbia River upriver bright chinook, Middle Columbia River bright chinook and north-migrating Oregon coastal chinook represent a significant portion of the Alaska harvest and are stable. The DPEIS should quantify the portion of the Alaskan harvest of these and other stocks and state if they are listed as threatened or endangered under the ESA.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses are undertaken in the environmental review processes associated with the annual fishery management measures.
# 172	Page 3-15 contains the words euphausiids, amphipods, osmeric abundance, capelin, and eulachon. EPA recommends that the DPEIS define these terms.	EPA	Definitions for "euphausiids, amphipods, osmeric abundance, capelin, and eulachon" have been added to the PEIS and can also be found in the Glossary of Terms.
# 173	Pages 3-16 and 3-17 state that to date, the NPFMC has never exercised that option, and has consistently deferred management of the commercial troll and recreational salmon fisheries in the EEZ off the coast of Alaska to the ADF&G. The DPEIS should state the frequency by which state actions are reviewed.	EPA	The language has been modified.
# 174	Page 3-17 states that sockeye, chum, coho, pink, and chinook salmon are harvested from the Southeast Alaska fishery. The DPEIS should state why a non-retention fishery exists only for chinook when other salmon species with listed stocks in the contiguous U.S. are also harvested.	EPA	The existing text indicates that the only listed stocks present in Alaska are chinook stocks.
# 175	Page 3-17 describes how sockeye salmon was the primary species harvested until the early 1900s. Are sockeye salmon still harvested? Are they a target species or caught inadvertently? What quantity of sockeye salmon are harvested? Are levels of sockeye harvested consistent with the Pacific	EPA	It is clear from the existing text that sockeye are still harvested. They are taken in directed fisheries and incidentally in fisheries directed at other species. There are no ESA listed sockeye taken in the fisheries. Fisheries are managed by Alaska and jointly with Canada where necessary, but because of the lack of associated

Comment Topic and Number	Comment	Commenter	Response
	Salmon Treaty (PST) and measures it internalizes to rebuild stocks along the British Columbia coast? The DPEIS should answer these questions?		ESA impacts were not a focus of the PEIS.
# 176	Page 3-17 states that since 1980, the overall harvest of chinook salmon in Southeast Alaska has decreased because of harvest ceilings imposed as part of the PST coastwide rebuilding program and to address other conservation measures. The DPEIS should state if parties to the PST have assessed how well the PST has performed in the rebuilding of unhealthy salmon stocks.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. The PEIS focuses on the use of alternative fishing strategies that could be used to meet conservation and use objectives derived from existing law. Evaluation of how well the PST has performed in rebuilding unhealthy salmon stocks is beyond the scope of the PEIS. The scope of the PEIS is discussed in Chapter 1. Criteria used to narrow the range of alternatives considered are discussed in Section 2.2.
# 177	Page 3-18 describes consumers of salmon. The DPEIS should describe the percentage of consumers who are members of minority or low-income populations to indicate if impacts from proposed actions would have a disproportionate adverse impact on these populations. Such information would be consistent with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.	EPA	Through the scoping phase of the PEIS, internal and external scoping did not identify any potential issues with regards to potential effects on environmental justice communities. As a consequence and in accordance with CEQ regulations pertaining to scoping, NMFS used scoping to identify "not only significant issues deserving of study, but also to de-emphasize insignificant issues, narrowing the scope of the EIS process accordingly (1500.4(g))." Therefore, a detailed analysis on potential impacts on environmental justice communities was not warranted.
# 178	Page 3-18- The DPEIS should describe market trends that differentiate ocean harvested salmon and farm-raised salmon and opportunities to conserve natural runs of salmon due to reduced market demand for salmon harvested from the ocean.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses may be undertaken in the environmental review processes associated with the annual fishery management measures
# 179	Page 3-19 - EPA recommends replacing bar graphs with line graphs to denote continuity of annual measurements and label the bottom graph with a term other than Ex-vessel Value that is more easy to understand.	EPA	NMFS is satisfied that the bar graphs clearly present the information. Ex-vessel value is a common economic term, but is defined in the glossary for convenience.

Comment Topic and Number	Comment	Commenter	Response
# 180	Page 3-21 should state why cost data on seafood processors is limited.	EPA	As cost data for seafood processors is not required to be collected under fishery management regulations, NMFS must rely on any cost data collected by the industry itself. Cost data is not collected by all seafood processors and the ability obtain such information from industry is limited due to the data being confidential business information. The rationale provided in this response for the limitation of such data has been incorporated into the FPEIS.
# 181	Page 3-25 should state why the labor force in Southeast Alaska cannot easily transfer between occupations.	EPA	The language has been modified.
# 182	Page 3-32 states that two models are used but then proceeds to discuss the Oregon Production Index, Washington Coast/Puget Sound 1, Washington Coast/Puget Sound 2, and FRAM models. The DPEIS should more clearly differentiate models, their usage, differences, assumptions, and strengths and weaknesses.	EPA	The language has been modified.
# 183	Page 3-34, a footnote to Table 3.4-1 should explain missing data for central California stocks of chinook and coho and text on surrounding pages should explain the ramifications of not meeting escapement goals for some stocks.	EPA	The language has been modified.
# 184	Page 3-37 should explain why marine habitat within the bounds of Pacific Coast fisheries has not been classified as critical habitat.	EPA	The language has been modified.
# 185	Page 3-37 states that historical ocean harvest rates on Sacramento River Winter Run Chinook ESU have been approximately 54 percent. The PEIS should explain what this and similar statements mean. The PEIS should additionally explain what is an acceptable harvest rate for conserving and recovering this ESU.	EPA	The language has been modified.

Comment Topic and Number	Comment	Commenter	Response
# 186	Page 3-37 states that insufficient information exists on the harvest of California Coastal Chinook ESU and other stocks (e.g., Central California Coho). The PEIS should state why this is the case.	EPA	The language has been modified.
# 187	Page 4-1 states that fishery management plans for the three jurisdictions considered here provide a flexible framework for managing fisheries to meet their conservation and use objectives. The PEIS should state if the referred to conservation and use objectives refer to those specified in the MSA, ESA, or both.	EPA	This point has been further clarified in Chapter 1. See particularly section 1.2.
# 188	Page 4-2 describes the negligible effect of the different alternatives on the physical environment in the Columbia River Basin. The PEIS should describe how returning salmon provide nutrients to the inland ecosystem and the difference in this contribution, if any, between the alternatives.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses on nutrient loading from salmon carcasses may be undertaken in the environmental review processes associated with the annual fishery management measures.
# 189	Page 4-6 and other pages should explain why incidental mortality of legal-sized chinook would be presumably eliminated under Alternative 2. This is not apparent.	EPA	Existing text indicates that incidental mortality will be reduced, not eliminated. Under Alternative 2 legal sized fish would be retained, thus reducing incidental catch-and-release mortality. This is the primary distinction between Alternative 1 and 2.
# 190	Page 4-11 states that fishing gear used in the salmon fishery has minimal, if any, effect on lower trophic level species. The EIS should include illustrations of the fishing gear used and an explanation of fishing methods to make this statement more self-apparent.	EPA	NMFS believes that the conclusions are self evident without further explanation.
# 191	Page 4-11 states that there is incomplete understanding of the dynamic parameters for growth, recruitment, and mortality. The EIS should identify why this knowledge gap exists, if it can be filled, and the priority given to filling this information gap versus others.	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. NMFS concludes that commenting on details of ancillary information gaps for the purposes of the PEIS is unnecessary.

Comment Topic and Number	Comment	Commenter	Response
# 192	Page 4-12 states that it is important to note that the higher chinook abundance baseline (Baseline 1) refers to higher abundances of chinook salmon, not higher total abundances. This sentence should state what is meant by higher total abundances.	EPA	The language has been modified.
# 193	Page 4-13 states that "from the society-as-a-whole perspective, partially offsetting changes occurs outside the specified region but they are not included in the economic effects analyses. This sentence is difficult to understand and should be rewritten.	EPA	The language has been modified.
# 194	Page 4-27 states that decreases in the take of chinook ESUs would accompany adoption of Alternatives 2 and 3. EPA is pleased with the reduction in the take of listed chinook ESUs because it appears consistent with the conservation of listed species as mandated by the ESA.	EPA	EPA statement. No response is required.
# 195	Page 4-37 states the modeled number of fish of each ESU that would be taken under the various alternatives but does not provide a context for that number. Additional information that would provide such a context includes the percentage of available stocks that is taken and threshold values, that, if exceeded, would result in jeopardy.	EPA	The section highlighted here (4.3.1.3) deals generally with generally with naturally spawning salmon – the proportion of the fish caught that would be listed. The following section 4.3.1.5 deals more specifically with impacts to listed chinook and coho. Tables 4.3-7 and 4.3-8 provide ESU-specific estimates of harvest rates under the various alternatives.
# 196	Pages 4-42 and 4-43 state that it is unknown whether pinnipeds are having a significant effect on salmon populations. The PEIS should state if this is important information and if so, if and when this information is obtainable.	EPA	The section has been revised to disclose that the take of salmon by pinnipeds and other marine mammals is a part of the estimate for natural mortality. The ability to distinguish and know the amount of salmon taken by marine mammals is beyond the scope of this PEIS. The estimate for Natural Mortality is a best professional judgment used in the fishery management process.
# 197	Page 4-44 states that salmon taken by fisheries are larger than those that might typically be preyed on by cetaceans and by seabirds. The PEIS should state if fisheries harvesting larger fish able to reproduce smaller age classes affects the abundance of these	EPA	The ability to distinguish and know the amount of salmon taken by marine mammals is beyond the scope of this PEIS. The estimate for Natural Mortality is a best professional judgment used in the fishery management process.

Comment Topic and Number	Comment	Commenter	Response
	smaller age classes preyed on by cetaceans and seabirds.		
# 198	Page 4-76 states that Option A, as modeled, increases effects on the listed Lower Columbia River and Puget Sound chinook ESU but reduces effects to other listed ESUs and substantially increases fishing opportunities in most areas. The PEIS should state if increasing the level of take of Puget Sound and Lower Columbia River chinook ESUs, listed as threatened, is consistent with the ESA. Moreover, the PEIS should demonstrate that sufficient conservation for these species would occur despite the additional take.	EPA	The increase in impacts to two ESUs is an outcome of the scenario analyzed under one of the baselines considered. However, the EIS is a programmatic document that provides a broad evaluation of policy level approaches to fisheries management. More detailed analyses related to annual fishery management measures would be needed to assess ESU-specific impacts. The general outcome of the Alternative is a reduction in fishery-induced mortality.
# 199	Table 4.3-15 uses the same economic parameters to describe effects on different communities. This makes it easy to compare the economic effects between the different communities.	EPA	Comment noted. NMFS agrees with the comment made.
# 200	Pages 4-82 and 4-83 generally describe the margin of error that occurs with modeling exercises. This discussion is important but the PEIS should additionally state the margin of error (or confidence interval) associated with the different predictions and state how more conservative management measures are being used to compensate for this uncertainty.	EPA	The language has been modified to address these points in Section 4.3.3.3.
# 201	Page 4-135 states that many salmon stocks along the West Coast routinely meet management objects. The word objects should be replaced with the word objectives.	EPA	The sentence has been revised to change objects to objectives as noted by EPA.
# 202	Page 4-139 lists factors affecting ESUs. Are these factors listed in order of importance or prevalence? The PEIS should do this if it is possible.	EPA	The relative importance of these factors vary by ESU and are not known.

Comment Topic and Number	Comment	Commenter	Response
# 203	Page 4-145 states that for the majority of ESUs, harvest reductions alone are unlikely to adequately mitigate risks. This is true, however, the PEIS should additionally state that is can be an important piece of an integrated approach to conserve listed ESUs.	EPA	The language has been modified.
# 204	Page 4-147 expresses extinction probability as a decimal. We recommend that NMFS consider recommending them as a percentage which would be better understood by the general public.	EPA	Clarifying language was added.
# 205	Page 4-149 - We recommend that the PEIS define tules, AEQ, and bright stocks.	EPA	Definitions for "tules, AEQ, and bright stocks" have been added to the PEIS and can also be found in the Glossary of Terms.
# 206	Page 4-152 states that this analysis is simplified and does not attempt to take into account the feasibility of the proposed alternatives, complications related to expected mortality rates under the alternatives, how the Canadians might respond to changing circumstances, or how the stock would respond in subsequent years as a result of increased escapement in previous years. The PEIS should attempt to quantify each of these factors because they might solely or cumulatively represent a significant effect(s).	EPA	As the EIS is a programmatic document, the analysis is a broad evaluation of policy level approaches to fisheries management. Specific detailed analyses on feasibility of the proposed alternatives, complications related to expected mortality rates under the alternatives, how the Canadians might respond to changing circumstances, or how the stock would respond in subsequent years as a result of increased escapement in previous years may be undertaken in the environmental review processes associated with the annual fishery management measures.
# 207	Page 4-158 should list NMFS' relevant selective harvest methods and the increasingly restrictive practices.	EPA	The suggested level of detail is inappropriate in this summary section on cumulative harvest effects. Alternative gear types are discussed elsewhere.